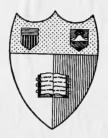


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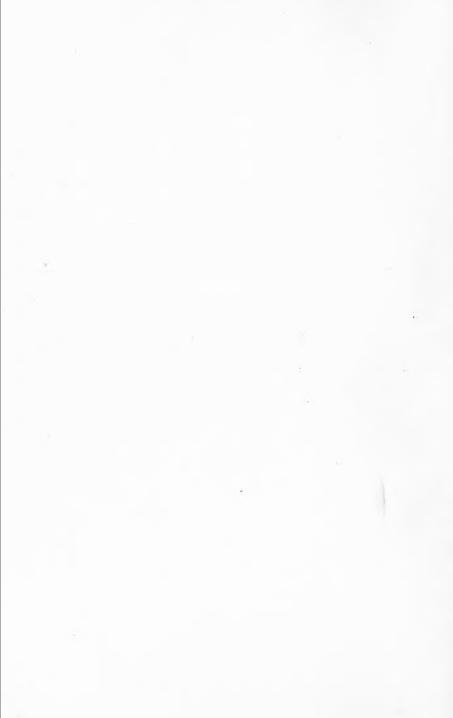
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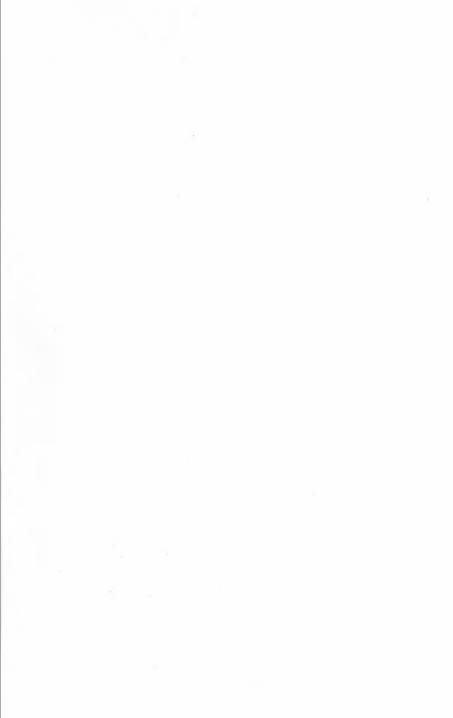
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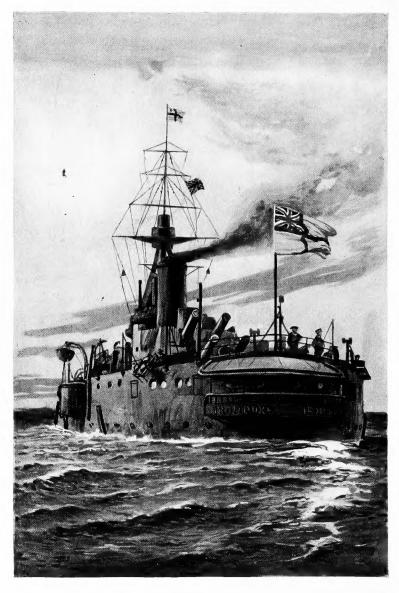
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THE BRITISH NAVY ITS MAKING AND ITS MEANING







H.M.S. "IRON DUKE."
Flagship of Admiral Sir John Jellicoe, Commander-in-Chief of the British Grand Fleet,
August, 1914.

(After a photograph by Cribb).

THE BRITISH NAVY

ITS MAKING AND ITS MEANING

BY

ERNEST PROTHEROE

AUTHOR OF
"RAILWAYS OF THE WORLD," "IN EMPIRE'S CAUSE"
ETC. ETC.

WITH 8 FULL-PAGE PLATES IN COLOUR AND 289 ILLUSTRATIONS IN THE TEXT



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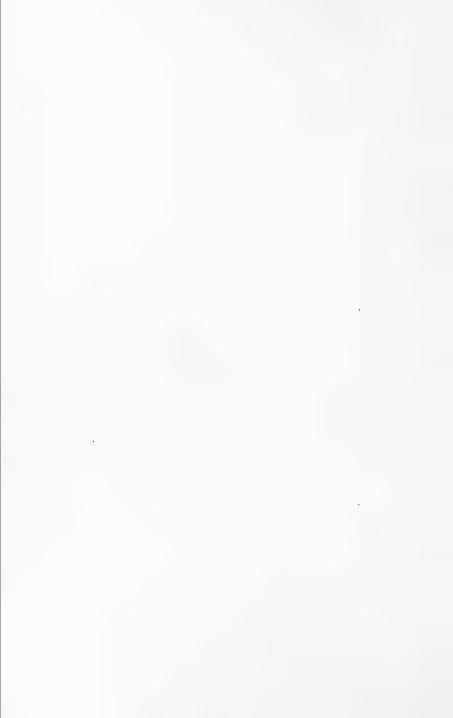
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AND WITH THEM ALL THE SONS OF THE EMPIRE IN THE HOPE

THAT THE FOLLOWING PAGES WILL INSPIRE THEM

WITH PRIDE IN THE HEROIC SEAMEN OF

OUR GLORIOUS EMPIRE PAGEANT



PREFACE

No apology is needed for offering to the youth of the British Empire a new book on the British Navy. It is as true to-day as it was in the spacious times of Queen Elizabeth that "Whosoever commands the sea commands the trade, and whosoever commands the trade of the world commands the riches of the world, and, consequently, the world itself." These were the prophetic words of Sir Walter Raleigh, and echoes of them may be found down the pages of British sea power and history.

Sir Edward Grey, in 1909, stated the same proposition for our generation in the following words: "The Navy is the common security of the whole Empire. If it ever fail to be that, it will be no use for us to discuss any other subjects, and the maintenance of the Navy in that position must therefore be the first care, not only of us at home, but of the self-governing Dominions beyond the seas"; and the greatest of all naval writers, Admiral Mahan, tells us in inspiring language that "Nelson's far-distant, storm-beaten ships, upon which the Grand Army never looked, stood between it and the dominion of the world. The world has never seen a more impressive demonstration of the influence of sea-power upon its history."

The outbreak of the great war of 1914 confirms and reinforces the views of our statesmen and administrators in the near and distant past. Every night in the early weeks of that war the British public slept securely in the knowledge that the silent work of our magnificent fleet was guarding its own ports and blocking the ports of the enemy; and they woke every morning to resume their business as usual, in full confidence that the spirit and tradition accumulated during the centuries would serve to guarantee for centuries to come the integrity of our homeland and the unity of our Empire.

These things do not change with the necessary and inevitable changes in naval construction, Admiralty government, and the munition for war. It has been the endeavour of the author of this viii PREFACE

book to trace the course of these changes from the earliest times down to the present day, and thus to provide a complete history of our First Line of Defence in every period of its active and glorious life. Such a history includes other histories: Shipbuilding, Exploration and Discovery, Empire-building, are all parts of the story of Britain's Navy, and find their appropriate places in the record contained in the present volume.

The author has had the advantage of assistance from various expert authorities, and in this respect would like to acknowledge his indebtedness to Sir Percy Scott for permission to give a résumé of the Submarine and Aircraft versus Battleship controversy, and to the proprietors of "The Fleet" for the useful Appendix. The names of various individuals and firms are acknowledged in the List of Illustrations, or under the illustrations themselves, and special thanks are tendered to the following for their kind co-operation in providing interesting pictures to elucidate and amplify the text on the pages stated:—

- Messrs James Nisbet & Co. Ltd.:—pp. 6, 17, 50, 72, and 85, from "Half Hours of Early Naval Adventure"; pp. 119, 145, 159, 166, from "Half Hours on the Quarter-Deck."
- Messrs Sampson Low, Marston & Co.:—pp. 135, 156, 176, 283, 320, 349, 377, 390, 415, 440, 452, 469, from "Our Navy for 1000 Years."
- Messrs George Allen & Unwin Ltd.:—pp. 210, 231, 272, 287, 291, 329, 337, 339, 365, 367, 407, 419, from "Sea Fights and Adventures," by Sir J. K. Laughton.
- The Navy League:—pp. 385, 396, 570.
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- Messrs John Brown & Co. Ltd. (Clydebank) :--pp. 558, 571, 573, 576.

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THE BRITISH NAVY

CHAPTER I

SHIPS OF OLD TIME

"The British Navy, our first line of defence, is the pride of our race, and we look to it to watch with jealous care that 'precious stone set in the silver sea.' Our war vessels of to-day are manned by men still 'feared for their breed and famous for their birth,' hardy seamen filled to the brim with the courage of their woodenwall forebears, and swelling with justifiable pride in the glorious flag that has 'braved a thousand years, the battle and the breeze.'"

The foregoing may be taken as the text of this present work, and therefore it should be worth while to glance back along the corridors of time, and learn something of the evolution of the ship that has played so great a part in the upbuilding of the British Empire, "whose morning drumbeat encircles the globe with one

continuous strain of the martial airs of England."

The earliest navigator was prehistoric man, who floated down a stream on a log or a branch, which in course of time led to the construction of rafts of logs bound together, or the hollowing-out of trunks of trees by means of tools or of fire. A punting pole would be a very natural provision, which in turn would suggest the utility of a paddle, and then an oar. When floating with the wind, the mere act of the navigator standing up would expose a larger surface to the breeze and give additional speed to the boat. This would lead to the erection of a pole on which to suspend a hide, and thus the sail would come into being. Professor Ratzel declares that even the discovery of fire has been of less moment to the progress of mankind than that of the inventor who first joined logs together into a raft and set out on a voyage of discovery, even though it were only along the sea coast.

The Egyptians were the first to whom shipbuilding can be traced; and in the British Museum is an amphora, a vessel for holding wine or oil, found in Upper Egypt, and dating back to 6000 B.C., on which is depicted a sailing ship. This crude representation is particularly interesting, for in the high bow and curve of the hull, and the mast with its square sail, we see the first beginnings of the modern full-rigged ship. There is a figure-head at the extremity of the stempost,

1

below which is a platform for the look-out man, who in later Egyptian ships is shown with a pole for taking soundings, and for pushing off. There was a small cabin right aft for the accommodation of the owner or any passenger of importance.

For the earliest recorded shipbuilder we have to turn to Biblical history about 2350 years before Christ, when Noah constructed the Ark, which it is calculated was 450 feet long, 75 feet broad, and

45 feet deep; and it was pitched within and without.

By that time, however, Egyptian sailing boats were decked and fitted with a mast, which when not required could be lifted bodily out of its sockets and laid upon the roof of the after-cabin. the fourth and fifth dynasties the boats had increased in size and were more seaworthy, and the mast and rigging showed some advance. The mast was in the shape of the letter A, fitting into grooves either in the deck or the side of the ship; there was also the treble, or tripod, mast. The deep, narrow sail extended from the top of the mast down to the deck, being fitted with both yard and boom. Backstays became necessary as ships grew bigger, with correspondingly heavier gear. These backstays led from about three-fourths of the way up the mast to that part of the deck about one-fourth of the ship's length forward of the stern. The steering was in the hands of several men with paddles, and the paddlers faced in the direction in which the ship was proceeding. look-out man is shown forward with his pole, and amidships is the commander with a thong stick with which to urge on the paddlers. The reader should notice the marked overhang at bow and stern, bearing in mind that the earliest boats took their general lines from the fish, duck, and swan, or other creatures of the water.

Fortunately we have not now to rely wholly on wall pictures, or vase decorations, to tell us something about these ships of the far-off past. In Egypt it was the custom to place in the tombs of the dead little sailing ships, so that the deceased could sail upon the waters of the underworld. These models faithfully represented the craft of the day and tell us practically everything concerning

the ships and their rigging.

Some of these wonderful little models were discovered at Rifeh in 1906-7, and two of them are now preserved in Manchester Museum. The first model shows the ship complete with mast and yards, braces, topping lifts and halyards; in the second the mast is lowered on to the cabin and is balanced by a stone weight. The steering oar has a highly decorated blade. Paddles have now given way to oars, and the rowers sit with their backs towards the bow, instead of facing it as did the paddlers. The look-out man is shown in both models.

In the first model the crew is hauling at the halyards (ropes for hoisting or lowering sails and spars) and getting in the sheets (ropes fastened to the lower corners of a sail) and braces (ropes

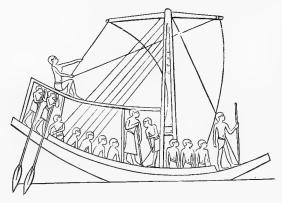


AN EARLY VOYAGE OF DISCOVERY

controlling the yard). Sheets had become necessary when the sail ceased to reach right down to the deck. The boom, which was fixed, was introduced to give the sail a better setting.

In later times the double and the treble masts were superseded by the single spar, and the deep narrow sail gave place to the shallow square sail. To strike the sail it only required the two halyards to be slacked off, and the yard descended upon the boom, but about 1250 B.C. the boom disappeared and the yard became a fixture, bringing in the use of brails, or ropes for furling the sail. This rig became the standard in the ships of the Phœnicians, Greeks and Romans for at least a thousand years.

In the possession of a long navigable river Egypt was peculiarly well fitted for the early shipbuilder to learn the elements of his



AN EARLY EGYPTIAN SHIP

business; for during a great part of the year a gentle breeze from the north blew up the river with the fixedness of a trade wind, so that ships could ascend into the interior of the country without the use of oars, and could return down stream rowing with the current.

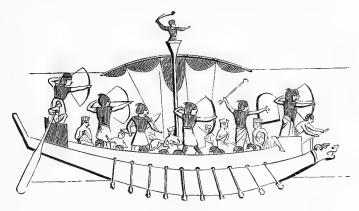
Egyptian ships had a most marked influence on the shipping of other peoples, even as distant as the Far East. We have only to look at a Burmese junk, such as plys on the Irawadi to-day, to find the double A-shaped mast, square sail and steering paddle at the side.

The Egyptians not only navigated the Nile, they coasted along the Mediterranean. Rameses II is said to have constructed a canal from the Nile to the Red Sea, in which the Egyptians trafficked very considerably in bigger and heavier craft than those employed for purely river service. Punt, the present-day Somaliland, was visited regularly by sea for gums and resins, wood and precious metals.

Of course other nations had become shipbuilders and seamen,

and about 1200 B.C. raids upon Egypt were being made by the Philistines from Crete, who had established themselves along the seaboard of Palestine from Carmel to Ashdod. At what early stage ships had been utilised for purposes of war it is impossible to say, but we are told that against the Philistines the Egyptian vessels "were crowded with archers who poured deadly fusillades into the enemies' ships." The first naval battle in history was fought off the Egyptian coast, and the Pharaoh (Rameses III) won an overwhelming victory.

In later years the glory of Egypt faded and the mastery of the sea passed to the Phœnicians. Judging from reliefs and coins their ships were almost identical with the Egyptian craft of the time of Rameses III. The Phœnicians were excellent sailormen, and

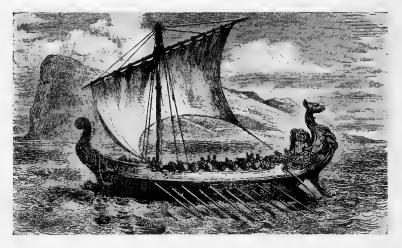


EGYPTIAN WARSHIP

they effected notable improvements in their ships, which enabled them to become the greatest navigators of the ancient world, long before the Greeks and Persians rose to maritime power.

About the year 980 B.C. the Phœnicians possessed mercantile navies that extended their voyages from the Levant to beyond the Pillars of Hercules, one of which was the rock of Gibraltar, where they founded Cadiz. They sailed northwards along the coast of France, discovered the British Isles, and eventually reached the Baltic Sea, where they obtained amber, which was greatly prized by the ancients. Southwards they followed the African shore probably as far as the Gold Coast. The Phœnicians were the carriers for King Solomon, for whom "once in three years came the navy of Tharshish, bringing gold, and silver, ivory, and apes, and peacocks." About 620 B.C. some Phœnician sailors are said to have sailed round Africa at the request of the King of Egypt, but they appear to have made no use of their knowledge.

There was a marked difference between trading vessels and warships; the former were small and round and broad, with a view to safety and carrying capacity. An average trading ship was worked by twenty-five men. But the warships were long and narrow and flat-bottomed, and the bow was altered in shape so as to permit the provision of a pointed beak, for use as a ram with which to crush in the planks of an opponent. To increase speed double banks of rowers were employed in galleys, which were called *biremes*; and later three banks of rowers in *triremes*. The banks of oars were one above the other, the lowest bank having short oars, the second longer ones, and the highest bank having a still greater length, so that the

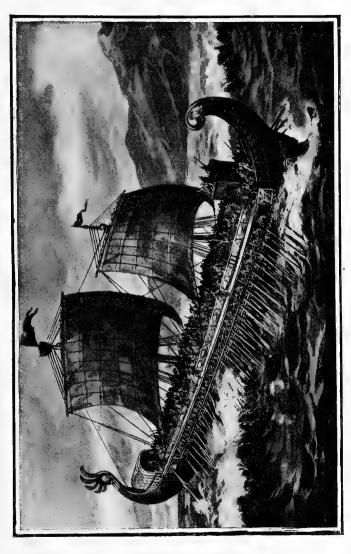


PHŒNICIAN GALLEY

three tiers of oars could be worked without interfering with each other.

Persia in due course rose to great eminence as a military and naval power. Its famous King Xerxes collected a great fleet with which to assist in crushing Greece, preparatory to the conquest of Europe. His vessels are said to have numbered quite 4000, and among them were no less than 1200 triremes, some of which carried 230 sailors and soldiers.

Themistocles persuaded the Athenians to build a navy, and a number of triremes were constructed with all speed. The total Greek fleet numbered less than 400 vessels. Off Salamis in 480 B.C. the hostile armadas met and fought for supremacy. Xerxes erected a throne on a lofty point on the shore of Attica, and there sat to watch the fight. His vessels were drawn up on the coast, almost blockading the strait between the island of Salamis and the mainland where lay the Greeks. The method of fighting was to row the galleys



against each other, the sails never being employed in action. It was considered a good stroke to charge and break off the enemy's oars, and thus make it difficult to navigate. When they had grappled, the combat was by swords, spears, and arrows, the ships thus being mere platforms to enable soldiers to fight on water. The air was thick with arrows and volleys of stones, and the din and clash were terrible. The Persians were not only incommoded by the wind, but their great numbers in a confined space created confusion; while the Greeks not only had fewer galleys, but they were smaller and easier to handle. In the end the Persians were defeated, 200 of their ships being sunk, in addition to a large number captured, whereas the Greeks lost only forty ships.

When Rome in her turn rose to great power, she found herself challenged by the Carthaginians from the opposite side of the Mediterranean, where the Phœnicians had founded Carthage in 814 B.C. Rome, whose armies were invulnerable on land, was almost at the mercy of the Carthaginians, who had established command of the sea. The Romans, who had neglected the sea, determined to have a fleet, and commenced building hundreds of galleys, which they modelled upon those of Greece. While the galleys were in building the art of rowing was practised on land, the crews being seated on benches; and the methods of fighting were also rehearsed in preparation for the time when the fleet went to sea. Roman determination had its reward in the defeat of the Carthaginians on the Roman coasts, and in 146 B.C. the Romans crossed over the sea and destroyed Carthage itself.

Of the Greek and Roman warships it is possible to give a more or less accurate description as afforded by the chroniclers of the time. It may be accepted that they embodied the best features of shipbuilding as then known, and have already been described; but various additional points in rather haphazard order may now be

mentioned.

War galleys increased in size, and five banks of rowers with about a hundred oars were quite common. It has been stated that the Romans built vessels with thirty banks of oars, but a little consideration will show the improbability of such a number, if only for the height of freeboard that would be necessitated. It is true that the Egyptians and other nations pinned their faith to ten and even sixteen banks of oars, but in actual conflict these galleys were clumsy to work, and could not hold their own with the lighter and more agile two- or three-banked galley.

It was the custom for the oars to be worked by slaves, who lived monotonous and toilsome lives; and when the galleys were going into action the poor wretches were chained to their seats lest they should suffer from panic, or should act treacherously towards their masters. The rowers were under the control of an officer called a "hortator," who sat on a platform, beating time with a gavel on a



ROMANS BOARDING AN ENEMY

sounding board to keep the rowers together and to set the desired speed. In the earlier ships thongs were used for rowlocks, but in later times there were holes in the sides of the vessel in which the oars were worked, the holes being covered with hide to protect the rower from the darts and arrows of the enemy. The ropes used aboard were of twisted hide or fibres of the papyrus plant; and the edges of the sail were also bound with hide. Windlasses came into use for winding cables and for working halvards.

The prow was worked up to a great figure-head, which sometimes was also the case with the stern. Along the bulwarks were placed screens of wickerwork or hides to keep out the spray, and also for protection against darts and arrows. The middle part of the deck was raised above the bulwarks, and here were fixed catapulta for throwing darts and ballistæ for hurling large stones. Turrets and castles were also erected aboard for the better placing of the bowmen and those who showered darts on the foe. Another very destructive implement was "dolphins of lead," which were suspended from the sailyards in readiness to drop suddenly into a hostile ship to knock a hole in her bottom. Sometimes a platform was erected around the top of the mast, a fighting-top, in which men could take their stand and aim at the enemy below with telling effect. The fighting-top was employed on Egyptian ships as early as 1200 B.C. Fireballs of cotton dipped in oil were set ablaze and thrown into the opposing ships in very early times. The Rhodians about 200 B.C. affixed braziers of fire high up over the bows of their ships, which were a terror to the ships of Syria, for in trying to keep their sails from contact with the fire they exposed their broadsides to the almost equally dreaded ram.

Projecting beyond the keel, at first above, but afterwards below, the waterline, was the cruel beak, or *rostrum*, of solid wood shod with iron or copper. As a protection against this terrible ramming weapon vessels were often girdled with thick cables; and at the stern sometimes was placed a structure called an *aphlaston* to ward off a blow in the rear. Upon each side of the prow it was customary to paint an eye in order that the vessel might be able to guide itself.

In the year 55 B.C. the Roman legions under Julius Cæsar were engaged in the conquest of Gaul, and when the invincible troops had swept across the country from the south to the Strait of Dover, the Roman general descried white cliffs on the other side of the twenty-one mile passage of water. Inquiry elicited the information that the strange land was the home of the Britons.

Julius Cæsar had some knowledge of the Britons, for when conquering the Veneti in the extreme north-west of Gaul, he found the enemy's fleet reinforced with ships from Britain. Although we are told nothing of the latter, we know that the ships of the Veneti greatly impressed Cæsar. While they retained most of the prominent features of southern ships, they were modified in order



to combat the rougher seas of the Channel and the North Sea. They were shorter in proportion to their width, with a high stem to meet a wave, and a high stern to defeat a following sea. Particularly was the Roman leader struck with their massive oaken timbers, upon which the beaks of his galleys made only trifling effect. Not a little of the strength of these ships was gained from the employment of cross-beams a foot in thickness. Instead of cables for their anchors the Veneti used iron chains, and their sails consisted of dressed leather in place of canvas. In seaworthy qualities these ships were far superior to those of the Romans, for with their bows both forward and aft, they could be brought to land with either end on, and they also ran before a storm with greater ease.

It is known that the Britons possessed coracles, or wicker boats covered with skins, in which they paddled about the rivers of their island home, or even coasted along the shores But to cross the channel to engage in trade they needed stouter craft; and in fact the vessels must have possessed some fighting, as well as sailing, qualities, or the Veneti would not have welcomed their assistance.

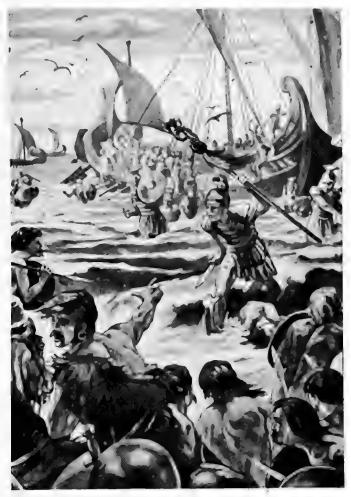
Julius Cæsar resolved on the invasion of Britain and, sailing from Boulogne on August 20th, with about 10,000 men in 80 ships, he landed near Deal the next morning. Although the Romans were strange to the peculiarities of the tides and had no knowledge of our shores, the fleet of the Britons did not put in an appearance to oppose a landing, attributed by some authorities to the fact that only recently a large portion of the British fleet had been lost while assisting their friends the Veneti.

The galleys and transports which Cæsar had built on the coast of France, were similar to those used in the Mediterranean and proved to be but ill-adapted to weathering a north-east gale, which sprang up while the Romans were ashore, and did far more damage to Cæsar's ships than ever the fleet of the Britons would have been able to contrive. Some of the larger vessels that were riding at anchor were driven ashore and wrecked; and even the lighter galleys, which had been hauled up on shore, did not escape damage from the high tides, of which the Romans had no experience in their own home waters.

With his expedition thus put out of gear at the very outset, Cæsar effected what repairs were possible and crossed back to Boulogne, where he commenced preparing boats more suited for disembarking a force in his next attempt. On July 7th in the following year another Roman fleet of 600 vessels crossed to somewhere near Sandwich, and again the fleet of the Britons failed to put in an appearance to complicate matters, although the natives gathered on the shore to repel the invaders.

The Britons fought desperately, but their rude valour was no match for the trained tactics of the Roman soldiers once they got ashore. Within a very short time Cæsar had fought his way

north as far as the Thames, and then the Britons made peace, consented to pay an annual tribute to Rome, and Cæsar took hostages for the due fulfilment of the exaction. The Roman fleet



THE ROMANS LANDING IN BRITAIN

having suffered much damage from another storm, Cæsar patched up what ships were left to him and returned to Gaul.

For nearly a century Britain was left undisturbed and then in 43 A.D., in the reign of the Emperor Claudius, the Romans commenced the real conquest of the island. The Britons made a brave

struggle for their independence, but they could not long withstand the legionaries, whose prowess had made Rome the mistress of the then known world.

Britain became a province of Rome and was visited by Roman



THE ROMANS LEAVING BRITAIN

emperors. Although the legionaries speedily subdued the southern portion of the island, the conquest in the north was slower, and between the Tyne and the Solway Firth and also between the Forth and Clyde, it was necessary to build walls and forts to aid against the incursions of the Picts, as the Caledonians were called. The Scots, who then dwelt in Ireland, crossed the Irish Sea in light

boats and plundered and killed along the coasts, wherever the Romans were in insufficient force to withstand them. But all the while Britain was making rapid advances in civilisation: the natives embraced Christianity; roads were constructed; mines were worked; garrison posts became important towns; a flourishing trade with the Continent grew up, the chief port of commerce being Londinium, the modern London.

For the protection of their colony the Romans established a fleet known as the Classis Britannica, manned by Roman soldiers, but with the oars of the galleys worked by Britons who were pressed into service. In 288 A.D. Carausius, with the aid of some pirates, got possession of the fleet and defied the Roman authority, calling himself Emperor of Britain. He was succeeded by Allectus, who was overthrown and slain by the Emperor Constantine. The revolted soldiers, who had been assisting Allectus, fled to London, where they were attacked and killed in the streets by the Roman

In May 1910 during some excavations at Lambeth, there was unearthed an old Roman boat in an excellent state of preservation. considering the centuries it had been hidden from sight. Judging from the date of coins found in it there is every reason to believe this was one of Allectus's vessels. The craft was of solid oak, and the complete boat must have been about 60 feet long with a beam of 16 feet.

After occupying Britain for more than three centuries and a half, the Romans evacuated the country in 410 A.D., in order to assist in defending the very heart of Rome, which was being assailed by hordes of barbarians from Central Europe. During the latter part of their occupation the Romans had practically abolished the Classis Britannica; and upon the departure of the legions Britain was again without a fleet, and the inhabitants were left defenceless against the attacks of those who would assuredly take advantage of their weakness.

CHAPTER II

A NATION IN THE MAKING

DURING the closing years of their rule in Britain the Romans had to contend not only with the Picts and Scots, but with the Saxons, Angles, and Jutes, who had commenced to ravage the eastern coasts with such pertinacity, that it was necessary to appoint a special officer, called the "Count of the Saxon Shore" to concert means for staving off the attacks. Carausius, for example, held this

office, his headquarters being at Boulogne.

The Romans had never been really strong at sea, and during the passage of several centuries had become even less effective. When they could meet the enemy on land the legions usually asserted their superiority, but often the pirates swooped down on a part of the coast where they were least expected, plundered the wealthiest Romans, and carried off men, women, and children to be sold into slavery. Apart from those whom the fierce invaders slew in hot blood in the fight, it was said to be their custom to torture to death, as a sacrifice to their gods, one out of every ten of their captives.

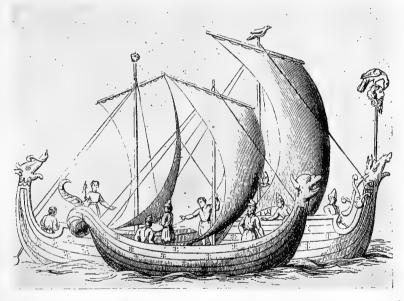
For hundreds of years the Britons had been engaged in peaceful pursuits, the legions doing all the fighting that was necessary; and consequently when the Romans took their departure the Britons were very ill-equipped to fight their own battles, in fact, far less able to oppose an enemy than were their ancestors, when they offered a stout resistance on land to Julius Cæsar. Now that the defensive walls were no longer manned by Roman soldiers, the Picts poured unchecked into North-humberland and laid the country waste at their own sweet will; and the sea rovers sailed up the estuaries and harried districts, that hitherto they had not dared to approach.

The Saxons, Angles, and Jutes were three tribes, or nations, who came from countries bordering on the Baltic Sea and the German Ocean, and which now form part of Germany. They were mainly blue-eyed, flaxen-haired men of stalwart build, garbed chiefly in shirts and tunics of coarse linen. Their arms gave them a very formidable appearance. Armour of thick metal rings was the common wear, and a shield was borne on the left arm. The weapons varied, for while some carried spears, bows, and arrows,

others wielded great battle-axes, or huge clubs studded with iron

spikes.

Now that there were no longer the Romans to fear, the Teutons came in increasingly greater numbers, with the fixed determination to settle in a land that was more fertile than their own. No longer did they attack only the North Sea coasts, but their ships appeared all along the southern shores of England. The Britons offered a brave opposition, but in the end the result was always the same—



SAXON SHIPS

the Teutons were the stronger, and gradually the Britons were

pushed further back from the coast regions.

Two notable chiefs amongst the earliest invaders were Hengist and Horsa, who, it is said, came at the express invitation of Vortigern, a British prince, who had sought their assistance against the Picts. When they had routed the northern barbarians, the Jutish leaders and their forces settled in the Isle of Thanet, where they were joined by great numbers of their countrymen. Vortigern married Rowena, the daughter of Hengist, but that did not prevent her father eventually from seizing Vortigern's possessions and establishing the kingdom of Kent.

And what had taken place in Kent was repeated in different parts of the country. When the Romans invaded Britain, if the natives submitted to their rule, there was no attempt made to destroy them, or to drive them from the land of their fathers. The methods of the Teutonic invaders were altogether different. They seized the land for themselves, and slaughtered all the inhabitants who did not fly to Wales, Cornwall, or Strathclyde.

For two hundred years the influx of Teutons continued without cessation, until there was established a number of separate independent kingdoms. The South Saxons held what is now Sussex;



ARRIVAL OF HENGIST AND HORSA

the kingdom of Wessex roughly corresponded to Hampshire; the East Saxons seized upon Essex, the low coast north of the Thames estuary; the Angles established themselves in East Anglia; Bernicia stretched from the Tees to the Firth of Forth, Deira corresponded to the present-day Yorkshire, and these two kingdoms united to form Northumbria; and Mercia was the great central kingdom of the Angles.

The forerunners of any Saxon settlement were always the searovers, daring mariners who never studied danger afloat, or counted the odds ashore. All of them were heathens, worshipping many

gods, among whom ranked high the sun and the moon. The warrior's chief deity was the god of war, into whose presence he would be admitted to drink ale or mead from the skulls of the victims he had laid low in battle. Fighting and slaughter were thus part of the warrior's religion, and the thought of so rich a reward in store bred an absolute indifference to danger. Little



THE "LONGSHIPS OF THE NORTHMEN

wonder, indeed, that the half-hearted Britons fled to the uttermost western fastnesses of the country, which was being wrested from them.

But a wild, roving and dangerous life did not appeal to all the Teutons who swarmed into England. A vast number came as peaceable settlers, whose chief interest lay in the cultivation of the soil. Groups of families, united by kinship, would establish a village community; each man had his own homestead with a portion of arable land attached to it; while the neighbouring pasture and woodland was common to all for the grazing of cattle

or herding of pigs. In the time of war, or to resist injustice or oppression, the forces of the village would amalgamate under recognised leaders, and were no mean fighters, even if less des-

perate than the purely sea-roving fraternity.

Although after a time there were no Britons to fight except in the west, the Saxon kingdoms were never at rest, for one or another of the kings would ever be seeking to enlarge his borders at the expense of his neighbours. Kent, in particular, at one time appeared likely to become the dominating state, for King Ethelbert established

his supremacy over the other kings south of the Humber.

When the Romans left Britain the country was professedly Christian, but with the advent of the Saxons paganism resumed its sway. King Ethelbert had married a Christian wife, and thus he viewed Christians with a tolerant eye, even though he would not forsake his own heathen gods. It was to Ethelbert and his queen, Bertha, that Pope Gregory sent a Christian mission under Augustine in 597; and in the end the King and thousands of Kentish men were baptised. Other missionaries commenced to labour in different parts of the country and slowly the people forsook their old pagan beliefs and customs, and the lamp of Christianity again shone bright and clear, where for a long season there had been ignorant and cruel superstition.

While the country was divided into petty states, constantly quarrelling and often at each other's throats, little genuine progress could be expected, but with the accession of Egbert to the throne of Wessex in 802, there was effected a great change that practically put an end to strife between the English kingdoms. Kent, Sussex, and Essex, were ruled by members of Egbert's own family; Northumbria, Mercia and East Anglia retained their own kings, who acknowledged Egbert as their overlord. The Celts of Cornwall and Wales accepted his authority, but the Celts of Strathclyde and the Picts and Scots refused to yield their independence. All the English kingdoms thus acknowledging Egbert as their overlord, he became practically the first King of England, an important landmark in our national history.

Before the time of Egbert, Northumbria and Mercia had in turn risen to great power, but had been unable to sustain it. In the case of Wessex, however, it was a remarkable fact that for a century and a half after the death of Egbert (839), every monarch in the Wessex line showed exceptional qualities, either as a warrior or legislator. This in itself was a great factor in sustaining the power of Wessex, but solidarity was forced upon the English by the appearance of a common enemy, against whom it was necessary to pit the full fighting resources of the kingdom under a trusted

leader.

The common enemy were the Vikings, daring pirates from Norway and Denmark. The Norwegians chiefly attacked Scotland

while the Danes fell upon the eastern coasts of England. They commenced to treat the English exactly as their ancestors had served the Britons nearly 400 years earlier. In their "Longships," or "Keels," they at first landed only to kill and plunder and sail off with their booty, but in later years they built forts for their protection while they raided the surrounding country.

Just as we are indebted to Egyptian burial customs for our most explicit knowledge of their boats, so some of the Scandinavian funeral rites afford us similar information concerning the Viking ships. There were three methods of putting noted sea warriors to rest; the remains were cremated and the ashes buried in a boat-shaped grave; the body was placed aboard the dead man's own ship which was then set on fire and sent out to sea; or the vessel was drawn ashore and when the dead seaman was placed in the bow, together with his weapons and other belongings, a huge mound was then built over the whole.

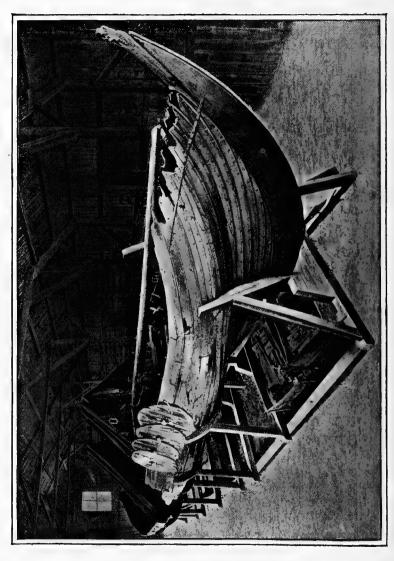
It was the discovery of certain of these mounds, not only in Scandinavia but also in England, and the unearthing of their contents, that have given us the opportunity of examining the actual craft of the daring sea-rovers, who played so great a part in

our history.

Some of these vessels are monoxylons, or dug-outs, dating back centuries before the time of Christ, even to the Stone Age. One particularly good example of this class was unearthed at Brigg in Lincolnshire in May, 1886. This prehistoric boat was hollowed out of one great oak trunk and was then strengthened with ribs, and a rude kind of keel was added to the flat bottom. To repair a big leak a patch had been let into the aperture, and then secured by means of wooden pins, and further stitched with leathern thongs. The boat, which is 48½ feet long, beam 6 feet and depth 2¾ feet, is now preserved in Hull Museum.

It will serve our purpose, however, to come straight to the Gogstad Viking ship, an example of the shipbuilder nearer to the period with which this present chapter deals. It was discovered in 1880 near to Sandefjord in Norway. This remarkably fine sailing ship is clinker-built, that is, the $1\frac{3}{4}$ inch planks, or strakes, along the sides overlap each other. Her timbers are of oak and are caulked with cord of spun cowhair. Her total length is 79 feet 4 inches; beam $16\frac{1}{2}$ feet; depth amidships, 6 feet, but $8\frac{1}{2}$ feet at the bow and stern. Her gunwale amidships is barely 3 feet above the water, but at the extremities is $6\frac{1}{2}$ feet. Her total weight is about 20 tons and draught 3 feet 7 inches.

It is impossible to say how high was the mast for which a step is provided, but doubtless it would be quite forty feet. There were r6 oars on each side, and for keeping out the water the rowlocks were provided with shutters. Rows of wooden shields protected the oarsmen from spray, as well as the darts and arrows of the enemy.



The rudder, the form developed from the loose oar at the side of the earliest ships, is pivoted on to a projection of solid wood. In the neck of the rudder a tiller was fitted. This form of rudder remained in general use until the end of the thirteenth century. By means of a cord it could be raised clear of the water when the ship was being beached. This Gogstad ship, which is calculated to have been built between the years 700 and 1000 A.D., was big enough to carry one or two 12-oared boats.

With the illustration at hand we may add a few general particulars more or less applicable to all Viking warships, which included several classes. The largest were the "Dragon" type, so called

on account of their figurehead; they were sometimes 130 feet long, with 64 oars. The "Long Serpents" were a little smaller, but particularly noticeable for the beauty of their design. A big vessel of either of the foregoing classes would carry as many as 600 men. The "Skuta" were the swift "shooting" ships, of which type was the Gogstad ship; and then there were smaller "Longships," averaging from 50 to 70 feet in length.

The mast was supported from the top of the high stem-post, and in addition there were shrouds on each side. The mast was



A "LONG SERPENT"

lowered by means of a tackle on the forestay; it was always lowered before battle, the oarsmen being relied upon for manœuvring the ship into position. The sail, which had no boom, was square, and its breadth exceeded that of the ship; its edges were strengthened with a binding of rope. White sails were often striped with blue and red; and in some cases a sail was of velvet or other expensive material, and beautifully worked with embroidered designs, depicting animals or even historical incidents.

With few exceptions the Viking ships had only a single row of oarsmen on either side, who were seated on benches with a gangway down the centre. Each oarsman's weapons were kept in a chest beneath his seat. The common method of fighting was to lock with the enemy's craft, and then engage hand to hand. The prow and the stern each had a raised deck. Picked men always

defended the stem, where the standard was displayed. Not infrequently the hulls of vessels were striped red and white; and with a bellowing coloured sail, and blood-red standards, on which was displayed a raven or eagle in black, an oncoming Viking warship must have been an impressive sight.

Like all the early navigators, the Vikings limited their voyagings to coasting wherever possible, and thus the men were able to land for the purpose of cooking, and as often as not they also slept ashore; but whether on land or afloat, each seaman slept in a leathern bag. In northern waters seamen restricted their sailings to spring and summer, and thus did not court disaster from the winter storms.

But these daring Northmen by no means limited themselves to coastal rovings. They certainly found their way to distant Iceland, from whence it is asserted they went across the Atlantic to America, although we have no means of learning how they accomplished such a tremendous voyage without compass or sextant. Of course they would have the rising and setting sun to indicate east and west, and at night they had such slender aid as they could gather from the stars; but in early times all mariners generally hove-to during the night.

Whether the Northmen visited America or not, it cannot be denied merely on the assumption that these early ships were too crude or too small to accomplish such a voyage. The Gogstad ship, for example, lacked nothing in perfection of design or workmanship, that present-day builders could have given it. This was fully demonstrated in the late 'nineties, when an exact replica of the Viking craft was built and sailed across the Atlantic on her own bottom on her way to be shown at the Chicago Exhibition.

During the several centuries that had elapsed since the English seized South Britain they had almost lost the art of seamanship, and without ships it was a difficult matter to cope with the elusive Northmen. When bent on a foray across the North Sea the Danes often carried ravens with them, which they would let loose, and then head their boat in the direction the birds were taking for the nearest land. The raven was always considered a bird of ill-omen, but to the English it now became doubly so, for they learnt to know that when the birds beat wearily ashore, the dreaded sea-robbers might be expected to follow in their wake.

Egbert had many fierce tussles with the grim invaders; in the succeeding reign his son Ethelwulf was sorely beset, and in 851 the Danes were in sufficient strength to winter in Thanet. Shortly about three hundred and fifty "Longships" sailed into the mouth of the Thames, and their crews sacked London and Canterbury. This severe blow roused the English to make a desperate effort to oust the Danes; and with a great army Ethelwulf defeated the enemy in a fierce battle at Ockley in Surrey, and for a time at least the Northmen were decidedly less offensive.

The relief was only temporary. Ethelwulf was succeeded by his four sons in turn. Two of them reigned only a short time, during which the Danes were not particularly active; but in the reign of Ethelred I they came in swarms, bent upon conquering England and settling in it. A great part of Northumbria was overrun, and York was taken. Edmund, King of East Anglia, was defeated and captured. The Danes offered Edmund his life and his crown if he would renounce Christianity and acknowledge their sovereignty. He refused to do either, and was bound to a tree and shot to death with arrows. The Under-king of Mercia was forced to pay tribute to the invaders, who were practically masters of the whole country, except Wessex, to which Kent and Sussex had been joined by that time.

Ethelred I. made a stern stand against the Danes in Wessex, and at Ashdown, near Reading, he won a great victory. He fought other battles with varying success, and finally was slain in 87r. Although the dead king had sons of his own, the crown was given to his youngest brother, Alfred, because he was better fitted to cope with the troublous times, and already had given proof of his courage in fighting by the side of Ethelred in various battles with the foe.

Alfred was only 22 years of age when he succeeded to the throne of Wessex, and he had borne his new honour but a few months when the Danes made a determined onslaught on his kingdom. Battle after battle was fought, but at length the Danes became so numerous that the forces of Wessex either submitted or took refuge in flight; and their king, deserted by all but a few faithful followers, dressed himself as a peasant and hid himself in the marshes of Athelney.

It seemed for a time as if Alfred's sun had set, but at last he emerged from obscurity and gathered together a fresh army to commence another series of fierce battles with the Danes, in which fortune first favoured one side and then the other. One notable English victory was won at Uffington in Berkshire, and in commemoration of their success Alfred's soldiers cut out in the turf the figure of a horse, high up on a hillside between Didcot and Swindon. The hill being composed of white chalk, the figure of the horse showed white and clear; and as the turf has never been allowed to grow again, the memorial still overlooks the vale of the White Horse to this day.

In 878, however, Alfred made peace at Chippenham with Guthrum, the Danish leader. Both sides were doubtless tired of the continual fighting, but it was not unlikely that the loss of 120 of their vessels in a storm off Swansea had more than a little to do with the Danish willingness to come to terms. By the treaty of



KING ALFRED AT THE LAUNCH OF A WARSHIP

Chippenham it was agreed that Alfred was to retain undisputed possession of Wessex and a portion of Mercia, while the remainder of the country between the Ouse and the Tees was yielded to the Danes, and henceforth known as the Danelaw, because therein the Saxon laws gave place to Danish.

Guthrum on his part consented to two notable conditions, namely, that he and his followers should embrace Christianity, and in future should assist the English against any further influx of Danes. Guthrum and his army were baptised in a body at Aller, near Athelney; but even if they intended to keep their promise to fight against their own countrymen, it was of little effect in face of the numbers who kept coming over the sea, refusing to be bound by any treaty conditions to which they had not subscribed.

Consequently the strife between English and Danes was soon as bitter as ever, and generally with the advantage on the side of the seamen, whose "Longships" could move from point to point to burn and pillage quicker than land forces could travel to cope with them.

Quite early in the struggle Alfred realised that his only hope lay in meeting the Danes on water before they could land, and to that end he commenced to build an English fleet of about 300 ships, longer and higher than those of the Danes, and sailors were hastily trained to man them; but the crews for the most part consisted of pirates from Friesland, whom Alfred paid to render him service. The vessels were divided into three squadrons to guard those parts of the coast that were most subject to attack. In 875 Alfred defeated seven Danish ships off Swanage, capturing one and putting the others to flight; in 894 he destroyed a Danish fleet off Appledore, and gained another great victory near the Isle of Wight three years later.

King Alfred gave us the beginnings of the Navy that in succeeding ages nobly played its part in building up our world-wide Empire. His naval victories were the first in that glorious list of successes that are the pride and boast of the British nation, whose flag floats triumphantly all round the wide world.

Alfred the Great passed away full of honours, having carved a niche in his country's history that will last for all time. But with few exceptions succeeding monarchs showed neither his courage nor statesmanship, and little more than a hundred years later England had almost passed out of the hands of the English.

During the next half century five successive kings made no headway against the Danes; but Edgar, who commenced his reign in 958, made a determined effort to follow in the footsteps of Alfred the Great. He formed an immense navy by calling upon every three "hundreds" around the coast to furnish at least one ship suitably manned. Originally the "hundred" was a district occupied by

a hundred family groups. In this manner the king got together sufficient ships to form four separate fleets of about 1200 vessels each, which he stationed on the north, south, east, and west coasts. The vessels were manned by at least 100,000 men, who were fishermen and agriculturists in time of peace. Quaint old Hakluyt affords us interesting details of Edgar's navy, which was always collected for the annual manœuvres after the conclusion of the Easter festival: "His Sommer progresses, and yerely chiefe pastimes were, the sailing round this whole Isle of Albion, guarded with his

grand navie of 4000 sail at the least." Only a few years later disaster was at hand, for Ethelred II was altogether too weak to deal with the critical situation. He was styled The "Unready," a term that had no reference to being unprepared, but betokening his failure to take counsel or advice. So pitiably weak was he, that he adopted the method of bribing the Danes instead of fighting them, paying them sums as large as \$10,000 and \$16,000 at a time to abstain from plundering, and money in those days was of far greater value than in our time. To obtain the means to pay the bribes Ethelred laid a tax called "Danegeld" on his people, which by no means was calculated to make him popular. Buying off the Danes proved to be absolutely futile, since fresh bodies of the enemy constantly arrived to make new demands, and Ethelred next conceived the mad plan of murdering his oppressors. On the night of St Brice's Day, 13th November 1002, the Danish settlers, not the raiders, were massacred in cold blood. Men, women, and children fell in the unsuspected onslaught. Among the slain was Gunhild, a Christian, and sister of Sweyn, King of Denmark.

Sweyn swore by all his heathen gods to avenge the death of his sister, and her husband and son, who had perished with her. He landed in England and ravaged the country far and wide, sacking towns as far apart as Salisbury and Norwich. Having kept his vow, Sweyn accepted a large bribe and retired to Denmark, not that his withdrawal had any effect on the hordes of Danes who now

poured into the island.

Sweyn again returned to the fray, and would accept no bribe, however large. His object was no longer plunder but conquest. Among the towns that speedily fell were Oxford and Northampton. Ethelred could not check the foe, and when one of his own greatest generals deserted and joined the Danes, with some of the English

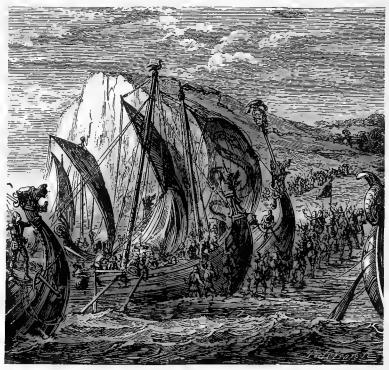
ships, he fled to Normandy.

A year later Sweyn died suddenly while heading his troops in an attack on the monastery of Bury St Edmunds, which had been founded in honour of Edmund, the martyred King of East Anglia. It was said that St Edmund himself appeared in defence of the monastery, and ran his spear through the body of the Danish leader, who died that same night in terrible torments.



KING RDGAR BRING ROWED BY KICHT INIBUTARY PRINCES

The Danish warriors selected Canute to succeed his father as King of England, but the English Witenagemot, or Parliament, recalled Ethelred to oppose him. He died in 1016, and was succeeded by his eldest son, Edmund Ironside. Edmund strove hard to succeed where his father had failed, and in a single year fought half-a-dozen battles, but in the end was overthrown by Canute, thanks partly to the treachery of some of his own supporters. Edmund



THE DANES LANDING IN FORCE

and Canute then came to an agreement concerning the division of the kingdom between them, but Edmund died within the year, and Canute became King of England without further opposition.

Canute reigned for nineteen years. Although he shrank from no barbarity to gain the English throne, he ruled with great wisdom and marked generosity towards his conquered subjects. The Danish king became really popular, and, when he crossed over to fight his enemies in Sweden, his army was composed largely of Englishmen. Not only was there peace at home, because Canute was undoubtedly master of his kingdom, but England began to be feared and respected by foreign countries.

With the death of Canute in 1035 England once more was in the throes of a great unrest. Two of the dead king's sons were rivals for the English throne, and the English themselves were at variance on the question, those in the north supporting Harold, while those in the south were in favour of Harthacanute. At first the country was divided between the brothers, but in 1040 Harthacanute became king. He possessed none of the good qualities of his father. His tyrannical rule caused him to be so generally detested that when his short reign of two years was ended by his sudden death, the English decided to have an English king, and no small proportion of the Danes were quite in agreement. Thus the old English line of kings was restored in the person of Edward the Confessor, who reigned until 1066.

Edward organised the vessels of certain fishing ports into something like a Royal Navy. Each port contributed an agreed number of ships for certain limited periods each year. Edward did not care to use the hated Danegeld to provide payment for their services, but granted to the ports increased privileges that made them rank

among the most important towns in the kingdom.

At this point it is necessary to take a brief survey of Normandy, that was shortly to play an important part in our history. About the time (876) that King Alfred was attempting to repel Guthrum, a large number of Vikings, under Rolf the Ganger, descended on Gaul and killed and plundered just as their friends were doing on the other side of the Channel. The French king, Charles the Simple, was forced to cede to them a portion of his kingdom, which became known as Normandy, the land of the Northmen. In a comparatively short time these Danes adopted the customs of the French; they became Christians; they seized upon the arts of civilisation; they became expert workers in metals; and their style of architecture, especially in the building of castles and churches, became quite famous. Their crowning quality was the recognition of discipline, and thus in the course of time the Normans became noted for their military effectiveness, and could put a highly trained force in the field.

The English and Norman Courts were on excellent terms, especially after Emma, the sister of Duke Richard the Good, married Ethelred II. and afterwards became the wife of Canute. It thus came about when the English were tired of Danish kings, their choice fell upon Edward, the only son of Ethelred and Emma, who, during his long residence at the Norman Court, had imbibed the manners and customs of his adopted country so thoroughly, that in many respects he was more Norman than English. When he ascended the throne of England it was only natural that he should surround himself with the friends of his youth. Duke William of Normandy, with a large retinue of nobles, paid a visit to the English Court, during which it is said Edward promised to bequeath

his crown to William. It is not very likely that Edward did anything of the kind, but it is quite certain that Duke William made up his mind to add England to his dominions whenever the time was

ripe for it.

The strictly legal heir to the throne was Edgar, The "Atheling," great-nephew of Edward, but the man in the public eye was Harold, son of Earl Godwin, a powerful noble and second in the land only to the king himself. During a great part of Edward's reign Harold was the power behind the throne, often fighting the people's cause against the king's Norman favourites, and eventually becoming the foremost man in the kingdom.

Naturally Duke William saw that Harold might prove an obstacle to his own ambition, and when the English earl was wrecked on the shores of Normandy, he seized the opportunity to obtain a promise from Harold that he would support Duke



KING HAROLD'S SHIPS (Bayeux Tapestry)

William's candidature for the English throne. To make the promise more binding, Harold was required to take an oath with his hand resting upon a silver casket. He did not learn until afterwards that the casket contained sacred relics that in those days made the oath doubly binding.

Upon the death of Edward the Confessor Harold promptly ascended the throne, only to find that William of Normandy intended to enforce his claims, and commenced to collect a great force with

which to invade England.

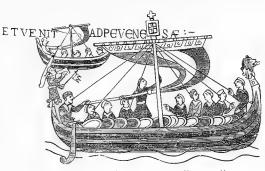
Harold was quite aware of the impending Norman invasion, and kept strict watch upon the Channel. But Duke William waited until Tostig, the brother of Harold, revolted in the north and joined forces with Harold Hardrada, a powerful Norse chief, who invaded England at the suggestion of William himself. King Harold promptly set out for the north with the largest force he could gather, and at Stamford Bridge, on 25th September, he routed the enemy in a great battle, in which both Tostig and Hardrada were slain.

King Harold's navy had to render service every year from just

after Easter to the Feast of Nativity (8th September), and all through the summer the English fleet was ready to offer battle to the Normans on the sea. But Duke William delayed setting out; part of his fleet was destroyed in a storm; and in addition the invasion of England was not very popular with the force upon whom William relied to add to his dominions.

Meanwhile, their period of annual service being at an end, food aboard being scarce, and the men being required ashore to work in the harvest, the English ships returned to their various ports. Three weeks later Duke William crossed over with about 900 ships and 15,000 men, and effected an easy landing at Pevensey, near Hastings. It is said that when William had got his army ashore, he caused his fleet to be destroyed, thus intimating to his

soldiers that victory must be theirs, if they wished to see Normandy again. None of the Norman ships exceeded 30 tons burden. At their head was Duke William's own ship, the "Mora." On its prow was the golden figure of a boy blowing an ivory horn; at its mast-head flew a



DUKE WILLIAM'S SHIP, THE "MORA" (Bayeux Tapestry)

sacred banner blessed by the Pope; and in the breeze astern

floated the Three Lions of Normandy.

There was no time allowed Harold to nurse his tired army after the great fight in the north; without delay he had to set out for the south, where the new invaders were building entrenched camps, and ravaging the pleasant countryside around them. The English and the Normans met on 14th October 1066, and after a stubborn fight Harold was slain, and Duke William, a Thor's-Hammer of a man, became King of England to restore order in the land, where anarchy, plunder, outrage, and murder largely had been the distinguishing features of the weak and divided rule of the Saxon kings.

We have now seen that:

"The Romans in England they once held sway,
The Saxons they after them led the way,
They tugged with the Danes till an overthrow
They both of them got from the Norman bow."

Though many years had passed before the Normans and Saxons

became mingled in one people, when once it was an assured fact the nation was all the better for the union. It is to the blending of the best characteristics of Britons, Saxons, Danes, and Normans that the vigour and energy of the British-speaking race can largely be ascribed.



NORMAN SHIPS (Bayeux Tapestry)

CHAPTER III

THE ENGLISH FIND THEIR SEA-LEGS

KING ALFRED having established a Navy, and proved its value in defending the coasts against invasion, succeeding monarchs, more or less according to their capacity, devoted attention to our first line of defence. Ethelred II, for example, as already mentioned, used a portion of the Danegeld, the first tax ever levied in England, for the support of warships.

The villages of Hastings, Sandwich, Dover, Romney, and Hythe were the chief English fishing ports. They possessed useful ships and harbours, and their seamen ranked among the very best in the country. Various English sovereigns granted certain rights and privileges to these hardy fishermen and traders in consideration of their vessels being liable for service against any foreign

enemy.

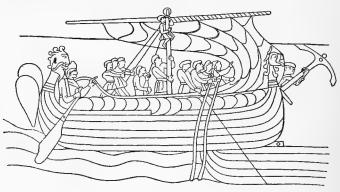
If the English fleet had been available, it is doubtful whether the Normans would have been able to land in sufficient force to conquer the country, as shown by an incident only a few days after William's arrival at Pevensey. Owing to a misunderstanding some reinforcements from Normandy put in at Romney, and the naval men of that port fell upon the invaders and utterly routed them. William afterwards marked his displeasure by burning Romney and taking Dover; but he was too clever a tactician not to perceive that it was to his advantage to conciliate the best mariners in his new possession, and consequently he encouraged the men of the Cinque Ports, who became his very loyal adherents.

The Cinque Ports fleet consisted of 54 well-manned vessels, each about 20 tons burden. They carried the regulation one mast and one large square sail. The bow and stern were built in large upward curves, which in war time supported platforms or castles for carrying the fighting men, of which there were usually about twenty-four. These were armed with cross-bows and bolts, longbows, arrows, spears, swords, and axes. For progress in calm weather long oars were used, but ordinarily the boats moved under The castles at bow and stern were inclined to make a boat top-heavy, and a considerable amount of ballast was necessary to rectify matters. In cases where trading vessels were called up

hastily for service the ordinary merchandise was used, especially in those vessels engaged in the wine trade; but when the ships were employed on a war footing for any length of time, doubtless stones formed the ballast.

In addition to the ordinary fishing and trading vessels converted into temporary fighting ships, galleys were built specially for the naval service, some of them being particularly long, and known as the "King's longships." Methods of navigation still remained exceedingly primitive. The seamen of the Cinque Ports made a great name for their skill in handling their ships; but in bad weather they suffered severely, and after a storm it was nothing unusual for the shore to be strewn with wrecks.

Apart from the writings of various contemporary chroniclers, we can glean a very good idea of the ships of this period from seals



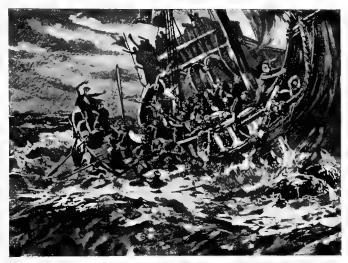
A NORMAN SHIP (Bayeux Tapestry)

and coins, stained glass windows, china, earthenware, and tiles; and the Bayeux Tapestry is a mine of information in itself. This fine record of matters historical is supposed to have been the work of Matilda, William's queen, and the ladies of the Court. Allowance has to be made for their play of imagination, and there is some distortion in matters of length, breadth, and height; but it is only fair to assume that William himself would have seen his royal consort and her ladies engaged on the tapestry, and his criticism and advice would not be without effect.

The tapestry depicts military and naval scenes of the Conquest. In the accompanying illustration, the mast, with the sail and yard still attached, is being lowered. The man on it is the look-out. The anchor is just being dropped. The striped hull and sail, the pavises, or shields, the dragon's head at the bow and stern, and the rudder affixed starboard, are all in accordance with the shipping of the day, which was markedly Viking in type. The shields hanging astern were probably for protection against ramming.

After the Norman Conquest Winchelsea and Rye were added to the Cinque Ports, each being required to furnish two ships. The fact that there was considerable rivalry between the various naval ports made for efficiency, for in a fight the men of one town strove to outvie those of another, and the enemy often had occasion to rue this spirit of emulation. But with both sides of the Channel now under the same ruler, the Cinque Ports flotilla had a comparatively quiet time for more than a century.

Henry I maintained a good squadron of ships, one of which made a pathetic mark in history. "La Blanche Nef" ("White Ship"), about 30 tons and 50 oars, left Barfleur for England with



THE WRECK OF THE "WHITE SHIP'

some 300 souls aboard, among them Prince William, the eighteenyear-old heir to Henry, and the flower of the English and Norman nobility. The captain was Thomas Fitz-Erard, son or grandson of the captain of the "Mora," that headed Duke William's fleet in the great invasion. Much feasting and revelry aboard led to careless navigation, which resulted in the vessel being piled up on the rocks in the dangerous race of Catteville. All on board perished save one, and England was thrown into mourning.

Henry II had larger fighting ships specially constructed for the service of the Crown, in addition to the usual forced levies. During this reign it was enacted that no vessel should be sold to leave England. Portsmouth was rising into importance as a naval port, and London and Bristol were doing an increasing trade with the Continent. Ships were getting bigger, one of the year 1170

carrying 400 people and providing them with confortable accommodation for a voyage. Some of the old Viking longships carried as many as 600 men, but only under conditions that entailed great hardships, their sole protection from the weather being a canvas roof.

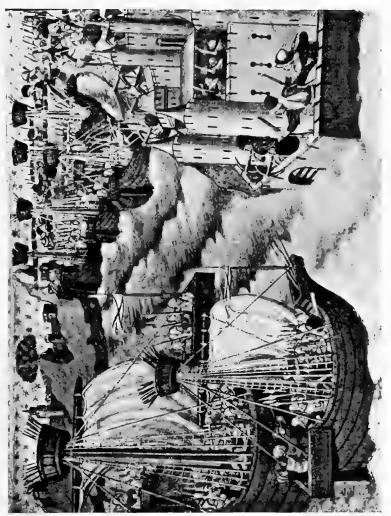
With the accession of Richard I (Cœur de Lion), the sixth of the Norman kings, our Navy received a remarkable impetus. Palestine was being overrun by the Turks, and when Jerusalem fell into their hands there arose a monk, Peter the Hermit, who went about exhorting the Christian nations of Europe to join in a crusade and devote their wealth, and their lives if need be, to wrest the Holy Land from the grip of the infidels. The Third Crusade (1190-91), under Philip Augustus of France, was joined by King Richard I, to whom warfare was the breath of life.

Although stray English ships had visited the Mediterranean, the transport of a military force to the Holy Land was a tremendous undertaking, and called for the provision of ships capable of engaging in so protracted a voyage. For the conveyance of troops and stores they needed to be of considerable capacity. The type selected was an enlargement of the Cinque Port boats, with a bluff bow and bulging sides, and carrying a single mast. These vessels were called "Busses," and a number of them were specially built.

The English fleet sailed from Dartmouth in April 1190, Richard crossing over to France and travelling overland to Marseilles, where he proposed to join his ships. The fleet, however, was not clear of the Bay of Biscay, when it encountered a storm in which some vessels foundered, and the rest had to put into Lisbon for repairs. The voyage was not resumed until nearly the end of July, and it was on 22nd August that about a hundred vessels arrived at Marseilles. In the meantime Richard had hired ten large busses and about a score of galleys, and had gone on ahead to Messina.

The fleet reached Messina in the middle of September, and Richard held a grand review amid the greatest jubilation, for which there was very justification, seeing that the English monarch and his armada were 2000 miles from home. Richard wintered at Messina, where he purchased four vissiers and nearly twenty galleys. These latter were probably lighter than those that had come from England. Galleys still remained the popular fighting craft, although they were ill-adapted for long voyages, even though they had three tiers of oars. Thirty additional busses also arrived from England with reinforcements and stores to atone for those lost in the Bay of Biscay.

The English fleet being thus completed, we may for a moment inspect the very mixed assortment of craft that sailed under the Cross of St George, which Richard had adopted as the national



SHIPS ATTACKING A FORT (From MS. Harl)

flag of England. There were about a dozen dromons, three-masted vessels, relying on their sails rather than oars; the busses already described numbered about 150, and there were nearly three-score ordinary galleys. Among the remaining vessels were some of the "Long Serpent" Viking type, called esneccas; galleasses, chiefly oared; and vissiers, with flat floors, for carrying horses. The vessels were remarkably well-equipped, being provided with spare rudders, oars, anchors, sails, etc. The crew of each ship numbered at least fourteen men; and the larger vessels carried forty knights in armour and their horses, and forty foot soldiers, with provisions and fodder sufficient to last for a considerable time.

Many of the English ships were furnished with fighting-tops, and in some cases carried engines for throwing heavy stones; and "Greek fire" was not forgotten, with which to "warm-up" an enemy. From very early times fire had been used in warfare both on land and sea, but about the middle of the seventh century a Greek of Heliopolis invented a mixture of nitre, sulphur, and pitch that would burst into flames upon exposure to the air. Tow steeped in the Greek fire, and discharged from tubes or other contrivances, was particularly dangerous to spars and sails, and apart from the flames, the fumes were suffocating. The mixture would burn even on water, the only effective antidote being earth or

The fleet left Messina early in April, Richard in his flagship, the "Trench-de-Mer," or "Clipper," as we should call it. The vessels sailed in eight separate lines, each within trumpet call of the other. On Easter eve, when only a few days out, a terrible storm scattered the ships, most of the men being prostrate with seasickness and greatly terrified. During the night Richard kept a light burning at his mast-head, and at last got "his chickens gathered round the mother hen," with the exception of several that had foundered. For a time it was feared that the vessels lost included the one having aboard the Princess Berengaria of Navarre, who was shortly to become Richard's bride, but the good ship rejoined the fleet, and at Limasol, in Cyprus, Richard and Berengaria were married, to the accompaniment of general festivities.

The voyage was resumed on 5th June, and on the next day the English vessels fell in with a large three-masted ship, painted green and yellow. The stranger flew the French flag and pretended to be friendly, until one of Richard's galleys was sent alongside, only for it to receive a strong dose of Greek fire, a murderous reception that proved the great "carack" to be an enemy. She was a Saracen with 1500 men aboard, and the English galleys commenced to circle round her, bent upon her undoing. Owing to her great height the English arrows and darts took little or no effect. while the enemy's archers found easy marks in the low-built craft

around them.



THE SHARP IRON PROWS CRASHED INTO THE SARACEN

Nevertheless the galleys closed in, and the Crusaders succeeded in scaling the lofty sides of the floating-castle, a fine example of English prowess in boarding. In a hand to hand conflict on deck, the Englishmen could not cope with the numbers of the enemy, and were glad to retire to their own boats and pull away to a safe distance. If the Saracens thought that they had won the day, they were speedily disillusioned. The galleys returned to the attack, coming on in a straight line to ram the great ship. The sharp, iron prows crashed into the Saracen, stoving in her sides, and within a few minutes she disappeared from the face of the Mediterranean.

A few days later Richard landed his forces at Acre, and joined the Christian army that had assembled to do battle with the Saracens for possession of the Holy Land, which to this day, how-

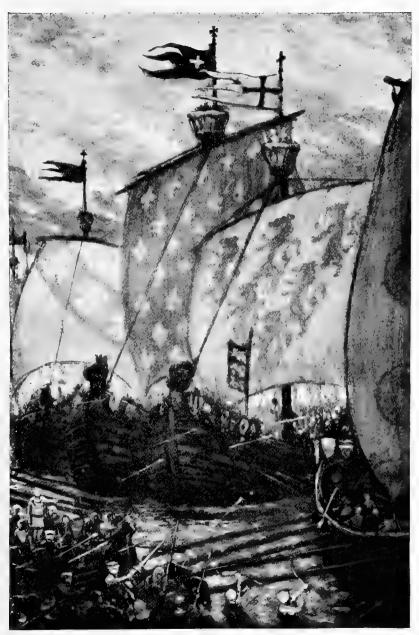
ever, has remained in the hands of the Turk.

This voyaging of the English fleet so far from home was an invaluable experience. Not only did our sailors become better seamen and better fighters, but they vastly increased their knowledge by meeting with unfamiliar types of ships. Richard and his leaders saw for the first time the great advances which the Mediterranean shipbuilders had contrived, while the ships of the northern waters remained only modifications of the Viking type. It can be imagined that a three-masted vessel with its extra sails and the rudders affixed to the farthest end of the stern, would fill the English with astonishment; but it would also fire them with the desire to possess similar ships of their own.

The reign of King John, who succeeded Richard I. in 1199, was one long tumult both in England and Normandy, but nevertheless the Navy made considerable progress in spite of his tactless and disastrous rule. Strangely enough at this period naval affairs were under the management of William de Wrotham, Archdeacon of Taunton, who was styled "Keeper of the King's Ships, Galleys, and Seaports." This mingling of ecclesiastical and naval duties scarcely accords with modern ideas of the fitness of things; but in those days the Church wielded immense influence in all departments of the State. Whether the Archdeacon was a marked success in matters spiritual or not, he appears to have done his duty nobly

by the navy.

For many years the Cinque Ports had rendered excellent service to the nation, but with the increasing interests of England abroad, it became necessary to have naval ports more conveniently placed than just because they commanded the Straits of Dover. Ships, too, were increasing in size, some of 80 tons having now made their appearance, while the Cinque Ports were gradually silting up, even if they were not too small to shelter anything like a considerable fleet. Portsmouth, on the other hand, possessed an ideal natural harbour, excellently situated for effectiveness, and sufficiently large



THE BATTLE OF DAMME

to accommodate a large flotilla of ships. As early as 1212 this port could boast of some kind of dockyard, and a strong wall was built to protect the galleys, when they were hauled up on the slips.

From this time onward the chief naval port of England was Portsmouth, and when the fleet was required for active service the vessels were summoned thither. One of the earliest occasions when this was done was in May 1206, when the Barons of the Cinque Ports were called by the Archdeacon of Taunton to attend at Portsmouth at Whitsuntide with all the service they owed, and the summons was accompanied by the intimation that failure to appear

would be construed into treason against the King.

It was in the time of John that the naval rivalry between the English and the French first commenced. In 1213 Philip Augustus of France attacked the Earl of Flanders, who was an old ally of John's. An English fleet of 500 ships under the Earl of Salisbury, was despatched against Philip, whose fleet was attacked in the harbour of Damme. As a great portion of the French crews was ashore at the time, the English easily captured 300 sail and destroyed 100 others. The remaining French vessels were then so closely blockaded that their crews burnt them to prevent them from being captured.

After this signal naval victory King John took to himself the title "Governor of the Seas," and he caused it to be proclaimed that all foreign vessels should lower their topsails in salutation of the English flag in the Channel. In this reign the fighting strength of the ships was increased by the introduction of Genoese cross-

bowmen, whose pay varied from 3d. to 6d. a day.

In an age when might was right, and turbulent spirits asked for nothing better than fierce fight and stirring adventure, drastic rules were necessary for keeping discipline on board ship, for when there was no enemy to engage their attention the sailors were prone to quarrel among themselves. If a man drew a knife upon another, or shed blood, the penalty was the loss of a hand. For killing another on board ship the offender was tied to the body of his victim, and both were then flung overboard. For fighting with the fists the punishment was ducking in the sea. A sailor convicted of theft had his head shaved, and when it was anointed with boiling pitch, feathers were shaken over it. The offender was dismissed the ship when next it put into land.

CHAPTER IV

ENGLAND MISTRESS OF THE NARROW SEAS

In the early part of the reign of King John we lost Normandy and our other possessions north of the Loire; in the closing years of his rule the King quarrelled with the barons, against whom he employed foreign mercenaries, who overran nearly the whole of England. The barons retaliated by inviting Louis, the eldest son of Philip of France, to come over and take the throne. The wife of Louis was John's niece, and thus the French prince might be viewed almost as a member of the English royal family, and in any case the English barons, mostly of Norman extraction, scarcely viewed a Frenchman as an actual foreigner.

Louis promptly accepted the invitation and landed an army in Thanet. John was speedily in difficulties for want of money, and his mercenaries refused to fight except for a solid cash consideration. Louis entered London in triumph, and for a time it looked as if England would become a province of France. John, however, still retained a few strong supporters, who feared the success of Louis would lead to rule by the barons, of which the country experienced a sad example in the reign of King Stephen.

Two of the most prominent men to throw in their lot with John were the Earl of Pembroke and Hubert de Burgh, governor of Dover Castle, and the nominal head of the barons of the Cinque Ports. The fleet had yet taken no active measures against Louis, for the seamen were utterly disheartened by the internal strife in the kingdom, and perhaps a little awed by the strength of the enemy.

The death of John in 1216 immediately put a different complexion upon affairs. The new king, Henry III., was only nine years of age. Many of the barons, who had opposed the father, now rallied round the son, and Louis was defeated at Lincoln in 1217. This battle, however, by no means settled the pretensions of Louis to whose aid a large fleet was bringing reinforcements. At that critical point Hubert de Burgh roused the men of the Cinque Ports to take action. Only forty vessels could be mustered, but the seamen were not only brave and skilful, they were inspired also with fierce loyalty for their young monarch, and would fight in his cause as long as there was a plank afloat.



The French fleet was making for the North Foreland with a fair wind, when the English flotilla put out to meet it, standing across the Channel, with the intention of tacking by means of their oars and sails, and bearing down on the enemy from windward. The French commander lightly assumed that the English were bent upon an attack on Calais, which was too well defended to cause him any qualms about its safety.

Very shortly the French were undeceived, for the English manœuvred into position and came sweeping down in their wake. De Burgh's one great naval maxim was to lay each ship alongside an enemy, and this system was followed out to the letter. Steering straight for the foe, as soon as they were within range, the crossbowmen and archers poured in deadly volleys of bolts and arrows.

and closing in and fastening with grapnels, the English utterly disconcerted the enemy by throwing unslaked lime into the air, which the wind carried into the faces of the Frenchmen. No sooner were vessels locked than the English leapt on to the invaders' decks, where they fought with a sheer desperation that could not be withstood. The French fleet was routed, although it consisted of nearly twice as many sail as the English.

There was great rejoicing at Dover when De Burgh arrived



SEAL OF WINCHELSEA, 1216

with his prizes, and the news of the victory set up throughout the country a wave of enthusiasm in the cause of the boy king, that speedily led to the submission of Louis and his withdrawal from the kingdom. England was saved, and the English Navy had made another stride in that glorious career which should gather fresh fame as it sailed on its triumphant career through the ages.

Out of very gratitude Henry ÎII. granted to the Cinque Ports still more privileges, and on their part they agreed to furnish, whenever required, 57 ships and 1200 men. There was, however, no real call for a fleet for many years, the Channel experiencing a long peace save for marauding pirates, whose daring at intervals

called for strong measures against them.

During Henry's long reign of over half a century, ships grew bigger and doubled masted, and with decks and cabins showed that the Mediterranean influence was beginning to tell. It was at this period that ships began to be mentioned by name: the King's own particular ship was the "Queen," and others were the "Cardinal" and the "Charity." English shipwrights had at length

realised the difference between a big boat and a real ship. For a capital example of the thirteenth century English ship, we cannot do better than consider the seal of Winchelsea of about the year 1216. The two trumpeters in the stern castle are giving warning that the vessel is leaving harbour; one of the hands is shortening the cable, and another is going aloft to unfurl the sail. The castles fore and aft were removable, so as not to be in the way when the vessel reverted to its normal business of fishing or trading.

Towards the end of Henry's reign the Navy was neglected to so great an extent, that when the Prince of Wales joined the Crusades in 1720, he could only muster 13 sail and a thousand men. There was, however, nothing lacking in the seaworthiness of the ships, nor in the skill of the seamen, for during a storm the English squadron escaped without loss, which was what no other part of

the allied fleet could boast.

Edward I., with his experience gained in the Crusades behind him, repaired the neglect of his father in naval matters. Two-masted ships were becoming more general, and the rudder at the extreme end of the stern was displacing the steering oar on the quarter, thus rendering our vessels for more manageable than heretofore. He did not keep the Cinque Ports fleet exclusively for service in the Channel, but divided it into three squadrons, whose headquarters were at Yarmouth, Portsmouth, and Bristol. The word "admiral," a corruption of the Arabic amir, was brought to England by the Crusaders, and in time it displaced the old Latin title Custos Maris, or "Guardian of the Seas." The title "Admiral of the English Seas" was first bestowed in 1297 upon William de Leybourne, who commanded at Portsmouth.

The seamen of the Cinque Ports and those on the opposite coast violently disliked each other, and there was constant ferment caused by outrages and the consequent reprisals. Some English sailors were captured by the French and hanged; our sailors crossed over to the harbour where their countrymen had suffered, seized some ships, flung their crews overboard, and carried off their prizes to England. The outcome of this incident was a direct challenge and acceptance to settle all differences by a pitched battle in midchannel on 14th April 1295. There was no limit affixed to the number of vessels on each side, and consequently the rivals inlisted their friends, or those who merely desired a fight for the love of it. A number of Irish and Dutch vessels joined the hardy Cinque Ports men, while some Genoese came to the aid of the French. Although the English ships were outnumbered by about two to one, by their seamanship and desperate fighting their crews nobly atoned for their lack of sail. They captured no less than 240 of the hostile ships, and sank a great number. As soon as the French had repaired their losses a fleet of 300 sail crossed over to Kent and burnt Dover, and our sailors repaid the compliment by sacking

Cherbourg.

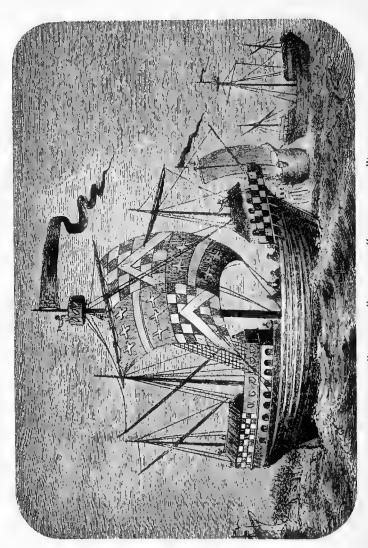
It is not known who invented the mariner's compass, but there seems little doubt that it was known to the Chinese in quite ancient times, but not put to any practical use until the eleventh century. Richard I certainly heard of it in the Holy Land, and Roger Bacon, an English monk and chemist, was discussing it in 1258. The



A PITCHED BATTLE IN MID-CHANNEL

earliest compass was a very primitive affair, merely a needle, first magnetised by a piece of loadstone, floating on a straw in a basin of water. For quite a long time master mariners were chary of using it lest they should be accused of practising the black arts. In any case the compass in its crude form would be of little practical utility, and it was not until the needle was balanced on a pivot and fixed on a card, as at present used, that it became a necessary feature of a sailing outfit. This improvement is attributed to Flavio Gioja of Naples in 1302.

The introduction of a really practicable compass gave a remark-



THE "EDWARD" AND THE "CHRISTOPHER"

able fillip to navigation, for hitherto the great obstacle to maritime discovery had been the necessity of keeping close to the shore. True, sailors could guide themselves during the day by the sun, and the pole-star by night; but when the sky was overcast there had been no means of ascertaining their bearings. Hence the discovery of the polar tendency of the magnetic needle gave navigators the necessary confidence to make extended voyages away from land.

During the greater portion of the fifty-seven years' reign of Edward III naval matters were particularly interesting. Edward was seeking to bring Scotland into subjection; Philip VI of France was striving to dispossess the English king of Aquitaine. The French king gave additional offence to Edward by sheltering David Bruce, son of the Scottish king. An open rupture occurred in 1336, when the French attacked English shipping and burnt Southampton. A flotilla of French galleys assailed and captured the "Christopher," the largest and most beautiful ship in Edward's navy. Her crew fought for a day and a night before the French could board her. As if there were not sufficient seeds of trouble in the foregoing, Edward must lay claim to the French crown, in right of his mother, Isabella, daughter of Philip IV of France, and by June 1340, he had gathered together a great army with which to cross the Channel to enforce his claim.

In front of the harbour of Sluys Philip of France had stationed a fleet of 400 sail, of which 120 were large ships of war, and a score of them were exceptionally big. The river estuary in which this mighty armament lay was so thick with masts that Froissart declares it looked like a wood. The advisers of King Edward recommended a postponement of the invasion of France in view of Philip's preparations to resist a landing; but he was bent upon the enterprise, and in a very short time he had fitted out a fleet of 240 ships, which appeared off Sluys on 23rd June 1340.

On the following day the English attacked, first standing out to sea so as to bear down before the wind upon the French fleet, which was in three divisions, their ships secured to each other by chains and cables. The French admiral thought the English were declining a fight, and instead of waiting for them to secure the weather-gauge he should have gone out to force an engagement. By unlashing his ships and merely cruising about his station he played into the hands of Edward.

When the English turned and charged down on the enemy, they rained showers of arrows upon the French decks. The air was so thick with deadly missiles that the enemy was thrown into confusion. Repeating the tactics of Hubert de Burgh, there was no attempt made to ram with the iron beaks; the English aim was to close in and grapple ship to ship, so that the men-at-arms could board and engage in the hand-to-hand conflict that was their forte. So heavily did the first two divisions of the French fleet suffer, that

a great part of their crews endeavoured to escape in their boats, but other French vessels fought till they could hold out no longer. The slaughter was fearful; for example, when the "Jacques de Dieppe" struck her flag to the Earl of Huntingdon, 400 dead bodies strewed her decks. The recapture of the "Christopher" afforded King Edward huge delight. The battle raged from seven in the morning until eight at night, by which time three-fourths of the French ships had struck their colours, and only darkness enabled the remnant to escape up the Scheldt, where the English could not follow, owing to their ignorance of the navigation. The English losses amounted to 4000 men, but on the French side the casualties were said to have been 30,000. This latter is probably an exaggeration, but in any case Froissart describes this sea fight as "felonious and most horrible," and it certainly was one of the most sanguinary in early history.

Thus did Edward III commence what became known as "The Hundred Years' War," during which the English often laid waste the fair provinces of France, sacked cities, and drained the country of men and money in asserting claims to the crown, which in the

end the French were able to retain.

Six years later (1346) Edward made preparations for another invasion of France, and summoned his ports to supply their quota of ships for the siege of Calais. His own ships numbered only 25, manned by 420 seamen. Fowey supplied 47 ships; Dartmouth, 32; Plymouth, 26; London, 25; Bristol, 22; Sandwich, 22; Southampton, 21; Winchelsea, 21; Shoreham, 20; Dover, 16; Margate, 15; Isle of Wight, 13; Weymouth, 13; Exmouth, 10; Teignmouth, 7; Ilfracombe, 6; and other ports fewer each; these vessels formed the southern division. To the north-eastern division Yarmouth contributed 43 ships; Newcastle, 17; Hull, 16; Lynn, 16; Harwich, 14; Grimsby, 12; and other ports in proportion. On 40 days' notice each port sent its ships every year, if demanded, but many vessels manned by 20 men only. The ports paid the charges for 15 days, and for any term beyond that, the King was responsible for the expense. The total fleet was 700 sail with 14,000 mariners.

Edward crossed over to France, and while the fleet laid siege to Calais, the English army of 30,000 men at Crecy (26th August, 1346) gained a great victory, such as never before had fallen to English arms. On the French side 30,000 rank and file lay dead on the field, and with them 11 princes, and 1200 knights. Among the slain was John, the blind King of Bohemia, whose crest was three white ostrich feathers with the motto *Ich dien*—"I serve." The crest and motto were taken by the Black Prince, and have been borne by our Princes of Wales ever since.

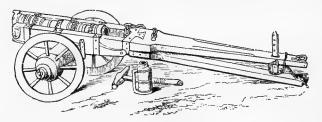
Of all the world's great battles Crecy possesses a unique interest, for it marked the first definite use of gunpowder. The English



THE BATTLE OF SLUYS

only used three pieces of field ordnance. They were small cannon made of trees, bored, and bound with iron hoops, and the missiles were of stone, scarcely larger than cricket balls. Doubtless this rude artillery made far more noise than it effected damage. It was the long-bow and the broad-sword that won the battle, but nevertheless gunpowder was henceforth to play an ever-increasing part in the strife of nations. Explosives wrought a vast change in fighting methods on land, for many of the old-time weapons were rendered quite useless in face of death-dealing ball and shot. Warfare afloat, too, would be revolutionised. Hitherto the fighting ships had been largely only carriers of soldiers, in order to board and fight as on land; whereas the time was at hand when ships could be riddled with cannon balls without the crews coming into actual contact.

Gunpowder was known in China and India long before it was introduced into the western world. It is claimed that the Chinese



EARLY CANNON

used it as early as 85 A.D.; the Arabs employed it in 690 at the siege of Mecca. Probably the first knowledge of the death-dealing mixture came through the Crusaders to Europe, where its first manufacture is attributed to Berthold Schwartz in 1320. This German monk and chemist happened to triturate some sulphur, nitre, and charcoal in a mortar, in the course of which he contrived a pretty explosion, that very nearly put an end to the life of the astonished chemist. Gunpowder, however, was known to Roger Bacon, as shown in a treatise published in 1316, twenty-four years after his death. "You may," said he "raise thunder and lightning by only taking sulphur, nitre, and charcoal, which singly have no effect, but mixed together and confined in a close space, cause a noise and explosion greater than a clap of thunder."

By the time Edward III had been on the throne a score of years, Spain was making a strenuous bid for naval honours. The King of Castile was friendly towards France, and showed his sympathy by capturing English trading vessels, and sometimes putting their crews to death. In 1350 the Spanish sent a large fleet to Flanders, and Edward decided to attack it upon its return home.

In August an English fleet was collected sufficiently big for the

purpose, and prayers for its success having been offered up in the churches, Edward embarked on the 26th at Winchelsea, in his well-tried and favourite cog "Thomas," which had carried him at Sluys. The Black Prince and the leading nobles of the land were aboard other vessels of the fleet, which lay in wait for the Spaniards as they passed down the Channel.

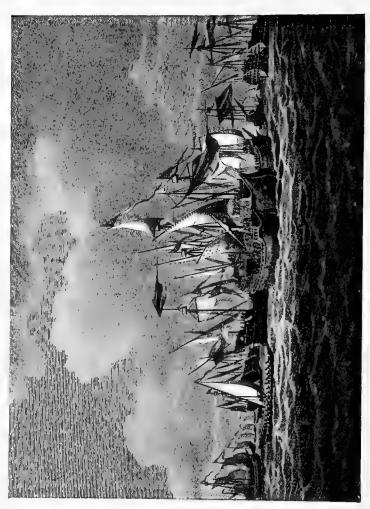
After only three days' waiting the Spanish flotilla of 40 large ships hove in sight, under Don Carlos de la Cerda, who rather welcomed the encounter than not, so that there was little delay in coming to grips. About four in the afternoon of the 28th, the Spaniards bore down on the English, Edward ordering the trumpets to sound for the ships "to form a line of battle." Says Froissart, concerning a big Spanish carack that crashed into the "Thomas": "The King's ship was large and stiff, otherwise she would have been sunk, for that of the enemy was a great one, and the shock of their meeting was more like the crash of a torrent or tempest." The rebound caused the castle on the king's ship to encounter that of the Spaniards, so that the mast was broken, and all in the castle fell with it into the sea where they were drowned. The "Thomas" also sprang a leak that threatened to founder her, but as her crippling opponent passed on, Edward contrived to hook on to another of the enemy, which his knights boarded and carried after a desperate struggle. But the "Thomas" was in such a serious condition that she had to be abandoned and the English king continued the fight in his Spanish capture.

By that time the engagement was general. The Black Prince speedily was in trouble, for he had grappled with a big Spaniard that was more than a match for him. The English vessel was on the point of sinking, when the Earl of Lancaster's ship came up on the other side to the rescue, with the result that the Spaniard struck her flag, and young Edward was able to leave his own sinking

craft for the more secure deck of the enemy's vessel.

If size alone had governed the fight, the huge Spanish caracks would have won the day with ease, but the smaller English ships worried their bigger opponents until they could board, and then the issue was seldom in doubt.

The English ship "Salle du Roi," under Robert de Namur nearly fell to the enemy, for while locked in deadly grip the Spaniards were having the better of the argument. Suddenly the sails filled, and commenced to carry the two grappled vessels away from the scene of action. With the prospect of being worsted, separation from his friends was the last thing desired by De Namur. Just in the nick of time the situation was saved by a brave English sailor, Hannekin. With drawn sword on his wrist, he clambered up the steep side of the enemy; hacked his way through some Spaniards who rushed to engage him; and sprang into the rigging. Up above he slashed ropes judiciously here and there, and down



ENGLISH VICTORY OVER THE SPANISH FLEET, 1350 (From an old engraving)

tumbled the huge sail to confuse the Spaniards to such a degree that they fell an easy prey to the fresh boarding party, which Robert de Namur himself headed, the moment the faithful Hannekin

gave him such a glorious opportunity.

Before evening this battle, known by the name of Espagnolssur-mer, ended in a complete victory for the English, who lost only a few vessels, and those chiefly the result of collisions. Of the Spanish ships fourteen were captured and some were sunk. The loss of life was heavy among the victors, and the Spanish casualties must have been enormous. Naval methods of fighting in those days were absolutely ferocious. Not the slightest compassion was evinced towards the survivors of the fray; the victors made a clean sweep of their opponents, ruthlessly casting overboard even the uninjured to save the trouble of being bothered with captives.

After this famous sea-fight Spain was not likely immediately to challenge Edward's claim to the title "King of the Sea." It is asserted, and not without some grounds, that in this battle off Winchelsea small cannon were used by the Spaniards on board ship for the first time. The ship of the Prince of Wales was perforated in many places, and, so far as is known, could not have been effected by anything but cannon balls. Only four years had elapsed since the English first used cannon at Crecy, and sailormen were notoriously conservative; but the new aid was bound to be adopted in English ships unless they were to be swept off the water by foreign nations.

The English Navy in the matter of ships was not keeping up with the times, and no matter how brave our sailors, they could not long withstand ships bigger and better equipped than our own. This was well evidenced in 1372, when an expedition was sent under the Earl of Pembroke to relieve Rochelle, which was being besieged by the combined fleets of France and Spain. The result was a painful shock to our national pride, for all our ships were captured by the enemy save one, and even that foundered instead of returning home; and, again, three years later the Spaniards captured or destroyed nearly forty of our ships in a harbour of Britanny.

Meantime the French had been building new warships armed with cannon, and Edward III had been dead only a few days when De Vienne, a noted French admiral, appeared off our southern coast to give us a taste of the quality of the French new fleet. De Vienne's drastic operations resulted in the sacking of Rye and Folkestone, and the destruction of Portsmouth, Plymouth, and Dartmouth; and then he sailed back to France with his ships filled with booty. When he had refitted he returned to renew his depredations, and inflicted immense loss on English property and shipping. John Philpot, a London merchant and alderman, collected a fleet at his own cost and Parliament voted a large sum of money to supply

other ships, and it was contrived to inflict defeats on the Spanish and French.

French ships in 1380 even sailed up the Thames and burnt Gravesend. For the time being England had not only ceased to be "Mistress of the Narrow Seas," she was no longer mistress of her own waters, and the weakness and unpreparedness of Richard II to withstand these foreign ravages led to rebellion in some parts of England.

It had required a calamity to prove to the English that it was a suicidal policy to allow the Navy to decline in strength, or to fail to seize upon new aids to warfare. Forthwith measures were taken to bring our fleet up to date, and less than twenty years later their ravaged coast was proving to the French that the English had profited by De Vienne's stern lesson.

During the next hundred years, covering the reigns of half a



THE COMMON SEAL OF THE BARONS OF DOVER, 1305

dozen monarchs, naval matters were of only ordinary importance, and the whole period may be dismissed very briefly. Henry IV, who succeeded to the throne in 1399, joined in a quarrel between the King of France and the Duke of Burgundy, for which interference the French attacked our southern coast and landed in the Isle of Wight. On the other hand we captured Jersey and Guernsey.

It is interesting to note that it is recorded that in 1406 the vessel which carried Philippa, sister of Henry IV, Oueen

of Denmark, to her home was equipped with "two guns, 40 lbs. of powder, 40 stones for guns, 40 tampones, 4 touches, r mallet,

2 fire pans, 40 pavys, 24 bows, and 40 sheaf of arrows."

Henry V (1413-1422) was a great warrior, who renewed the war in pursuit of the French crown. To attack France on land it was necessary to possess command of the sea, and there were no half measures in Henry's plans to gain it. In August 1415 he set sail from Southampton for the invasion of France, with a fleet of 1600 sail. Doubtless the majority of these were small trading vessels pressed into service, but amongst them rode the biggest ships that had ever been seen in the English service, e.g. the "Jesus," of 1000 tons; the "Holigost," 760 tons, and a number of caracks of from 500 to 600 tons. The advent of cannon demanded deeper ships and of sufficient strength to withstand the shock of guns. Several masts were now the rule, since one mast could not have carried sufficient canvas to work the larger craft. In this expedition Henry captured Harfleur after a five weeks' siege, which led to the great victory of the English army at Agincourt which startled all Europe.

Upon his return to England Henry added a considerable number of new ships to the Navy, and in 1417 he again invaded France and seized Normandy; after which he married the daughter of the King of France, who was an imbecile. It was arranged that Henry should act as Regent and succeed the afflicted king at his death. But it was not to be expected that a really great people like the French would submit permanently to a foreign conqueror, and within three or four years war broke out as fiercely as ever. Once more Henry landed a force on the other side of the Channel, but the constant strain and exposure to which the warrior king had subjected himself brought on his death whilst in France. At that time England owned quite half of that portion of France that lay between the Bay of Biscay and the River Rhone.

Henry VI was only an infant of nine months when he succeeded to the Crown, and England was governed by Regents. Their ideas of the importance of a strong Navy was shown by the prompt sale of thirty ships out of service. They were all between 400 and 600 tons, of which size Henry V had built nearly forty. The result was seen in later years when Henry VI lost what his triumphant father had won, and of our possessions in France only Calais remained

to us.

Edward IV still maintained the claim to the French throne, and made an effort to restore the Navy to importance. He landed an army at Calais, but Louis XI of France paid him 75,000 crowns to relinquish his claim, and to return to England. He died in 1483, and was succeeded by his thirteen-year-old son, who was murdered in the Tower of London by order of his uncle Richard, Duke of Gloucester, who became Richard III. He reigned only two years, and was slain at the battle of Bosworth by Henry Richmond, who married the daughter of Edward IV; and thus were united the Houses of York and Lancaster, which had struggled for the Crown for eleven years in the Wars of the Roses.

Early in this chapter there is reference to the invention of gunpowder, and the enormous change it would work in naval and military matters, and through them the world's affairs. But in 1476 William Caxton had set up his printing press in Westminster, which would work a revolution of an entirely different character, leading to the diffusion of knowledge and the corresponding advance

of progress.

CHAPTER V

A REAL ROYAL NAVY

HENRY VII ascended the throne at a time (1485) when the chief maritime nations of Europe had already commenced an era of exploration of the seas that would result in wonderful growth and expansion; and presently, indeed, one geographical discovery would claim to rank as one of the most momentous events in the history of the world.

It was about this period that Englishmen began to view the sea as their home. Their more protracted voyages in the pursuit of trade afforded them invaluable sea-training, and suggested improvements in ships that were duly reflected in naval affairs, and which eventually gave to England that naval and commercial supremacy, which she has long held in spite of all her rivals.

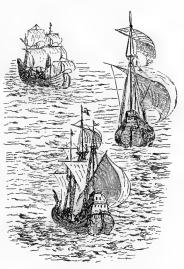
Prince Henry of Portugal was a keen student of navigation. On the rocky promontory of Sagres, nearly the most westerly point on the continent of Europe, about the year 1418, he established a' school for the training of theoretical and practical navigators. He gathered together a body of astronomers, cartographers, and skilled seamen; he built larger and stouter vessels specially designed for exploration; he equipped all his ships with the compass; and in particular he improved the astrolabe, which was the forerunner of the modern sextant. Prince Henry's great purpose in life was to discover a route to India, otherwise than via the Mediterranean and Egypt. Year after year he despatched expeditions along the northwest coast of Africa. In 1443 Cape Verde was discovered. Twelve years later a Venetian voyager, under Henry's auspices, reached the mouth of the Gambia; and incidentally the European seamen lost sight of the pole-star, and for the first time saw the brilliant constellation of the Southern Cross.

Prince Henry died in 1460, in which year one of his captains discovered the Cape Verde Islands. All the discoveries made by the Prince's navigators were recorded by the cartographers on portulanos, or sea-charts of the coastline, which early navigators always hugged for safety. Just before his death the King of Portugal had all the discoveries up to that time detailed on a mappi mundi, which was the work of a Venetian monk, a copy of which is still in existence.

The labours of Prince Henry bore remarkable fruit in later years. In 1471 the Gulf of Guinea was reached; in 1486 Bartholomew Diaz voyaged to the Cape of Good Hope; and on Christmas Day, 1497, Vasco de Gama arrived at Natal, and then proceeded across the Indian Ocean to Calicut. The discovery of the Cape Route to India and the Far East would in the course of time swell the commerce of the countries of Western Europe, at the expense of the ports of Genoa and Venice, which had risen to

immense importance owing to their proximity to Alexandria, that had hitherto been the halfway house in the European traffic with the East.

Meantime, in 1492, Christopher Columbus sailed across the Atlantic Ocean in an attempt to reach the East Indies, and literally stumbled into the New World, landing at San Salvador (Watling Island), one of the Bahama group. In a second voyage Columbus discovered Jamaica, but not until his third voyage in 1498 did he see the mainland of America. Even after his third voyage he had no idea that the newly-discovered country was separated from Asia by the Pacific Ocean, and, in fact, not until after the great navigator's death was the

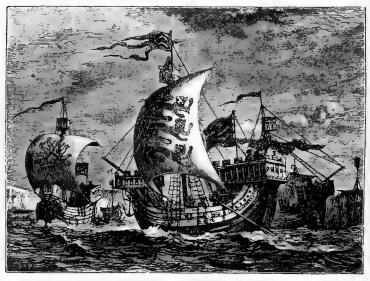


THE SHIPS OF COLUMBUS

fact made known that a new continent had been discovered. In his world-famous voyage Columbus set sail from Palos in Spain, on 3rd August 1492. Of his three ships, the biggest was the "Santa Maria," of 100 tons; length 90 feet and beam 20 feet; crew 52. The "Nina" was 40 tons, and the "Pinta" still smaller. Columbus returned to Palos on 15th March 1493, after an absence of 7 months 11 days. The return voyage he made in the "Nina," his flagship having sunk off Hayti. The "Santa Maria" was a "dull sailer and unfit for discovery." In 1908 a replica of the famous ship was built, and she sailed across the Atlantic in 36 days; and it was reported that she "pitched horribly."

Henry VII recognised the importance of maintaining a navy and of encouraging commerce; but English adventurers had set out on voyages of discovery before Henry's accession; for example, in the middle of the century the ships of Thomas Canynge, a merchant of Bristol, went as far as Iceland.

It was only by the merest fluke that the discovery of America did not take place under the auspices of Henry VII of England, instead of King Ferdinand and Queen Isabella of Spain. Christopher Columbus had besought in vain various monarchs to furnish ships for his project, and at length despatched his brother Bartholomew to solicit the assistance of the King of England. The venture appealed to Henry, and he promised the necessary aid, but a storm delayed



WARSHIPS OF THE FIFTEENTH CENTURY

the return of Bartholomew with the news, and in the meantime the Spanish monarchs had agreed to fit out the expedition.

In view of the voyagings of Columbus and Vasco de Gama, it was fairly certain that Spain and Portugal would speedily be at loggerheads, concerning their respective shares in the further discoveries that were imminent both in the East and West. An appeal being made to Pope Alexander VI in 1493, he issued a Bull granting to Portugal all discoveries eastward of a certain meridian, and to Spain all those westward of it. The demarcating line was an imaginary one drawn from pole to pole and passing a hundred leagues west of the Azores and Cape Verde Islands. These groups of islands do not happen to be in the same meridian, but that was a matter of little importance, for the line was shifted by consent to a point about 1100 miles west of the Cape Verdes.

Although the Pope coolly ignored any other nations who might

evince inclinations to add to their possessions, that did not prevent the English and Dutch setting out in the quest for adventure and riches, trusting to their luck and courage rather than the dubious advantage of a Papal Bull. In 1496 John Cabot, a Venetian merchant who had settled in Bristol, offered to do for Henry VII what Columbus had done for Spain. Henry was so impressed that he gave Cabot and his sons the right to sail where they pleased in seeking out new lands at their own expense, which certainly could not be called royal extravagance on Henry's part.

In May of the next year John Cabot, his son Sebastian, and a crew of 18 men, set sail from Bristol in "The Matthew," of 50 tons burden, accompanied by three or four smaller vessels laden with merchandise, which latter seemed to indicate that Cabot's scheme was not wholly philanthropic. This expedition resulted in the discovery of Labrador and Newfoundland, about a year before Columbus saw the mainland of America. Upon his return to Bristol in July after an absence of ten months, Cabot was welcomed as the "Great Admiral," and Henry awarded him the munificent sum of £10. A year later Sebastian Cabot took out 300 men to form a colony in the new land, but was forced to bring them back owing to the cold and lack of provisions. The credit of discovering the mainland of America thus belongs to the English, although nearly a century was to elapse before any settlement was established north of the Gulf of Mexico.

When Henry VII succeeded to the Crown he found shipping matters, both mercantile and naval, at a very low ebb, for the disastrous Wars of the Roses had sapped not only the blood, but the wealth of the country, and practically had put an end to all

thought of new enterprises.

As the new king had no designs on the French Crown, and the French themselves were engaged with Italy, Henry was in no pressing need of a fleet; but he had the sagacity to perceive that it was necessary to provide and maintain men-of-war in order to safeguard England's commerce, and to that end he commenced building ships that were a great advance upon any that had hitherto flown the English flag.

Henry inherited with the Crown only some half dozen ships of which the chief were the "Grace à Dieu," "Mary of the Tower," and the "Governor." To this nucleus of a fleet he added some vesesls which he purchased from Spain, and of his own building he added the "Regent," "Sovereign," "Sweepstake," and "Mary Fortune." The "Regent" was modelled upon a celebrated French ship of 600 tons. She had four masts. The forecastle and sterncastle were developed to a greater extent than ever before in English ships. There were round fighting-tops on the masts. She carried 225 serpentines, guns specially suitable for destroying rigging, sails, and men rather than damaging hulls. The

"Sovereign" was of a similar type to the "Regent," but smaller. She was constructed out of the "Grace à Dieu," broken up. The "Sweepstake" and "Mary Fortune" were three-masters, and carrying 60 to 80 long sweeps for rowing in calms, or to assist in getting into harbour. For the fighting men aboard these big ships were provided bows, arrows, spears, morris-pikes, halberds, bills, etc. In addition to the guns proper, there were arquebuses, a species of firearm resembling a musket, supported upon a forked rest when in use. At this time we were inferior to Continental nations in the matter of armament, and we hired foreign gunners to

teach us gunnery methods.

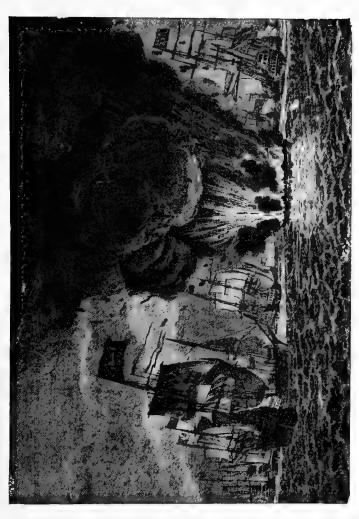
Henry VII did not establish a great Navy; he built only a few men-of-war, but they were the biggest our yards had yet turned out. This far-seeing king, however, encouraged shipbuilding by the offer of a bounty of five shillings per ton, which stimulated the building of bigger merchantmen, which could have been utilised during wartime. Even the Crown's own ships were let out on hire for trading purposes. These big ships were popular with merchants on account of their great capacity, and the opportunity of hiring them was eagerly seized, the "Sovereign," for example, going on mercantile voyages as far as the Mediterranean for the purpose of earning a little ready money for the Crown. This system of letting out royal ships on hire dated back certainly to the time of Henry III, for it is recorded that John Blancboilly, a merchant, paid fifty marks yearly for the use of the "Queen."

Henry VIII earned the title "Father of the English Navy," for from the commencement of his reign in 1509 he followed a definite naval policy, which consisted in steadily building ships

until he possessed the largest navy in the world.

Henry was in possession of the fine ships built by his father, and in the third year of his reign 8 new vessels were added to the Navy. In this year war was declared against France, and a fleet of 45 ships under Sir Edward Howard set sail for Brest, and entered into action with a French fleet of 39 sail. During a general fierce encounter the "Regent," under Sir Thomas Knyvett, master of the King's Horse, second in command, grappled with the "Cordelière," the French flagship. While a desperate struggle between the two crews was in progress the "Cordelier" took fire, with the result that both vessels, locked in deadly embrace, were blown up. We lost Sir Thomas Knyvett and 700 men, and the French mourned the loss of their admiral and a crew of 900. Such a sudden holocaust appalled the combatants in the other ships, and the battle came to an end forthwith.

In this same year was founded an institution that has rendered immense service to English shipping. This was the formation of the Guild of Trinity and St Clement, or as it is better known, Trinity House. The idea probably originated with Sir Thomas Spert,



ENGAGEMENT BETWEEN THE ENGIISH AND FRENCH FLEETS IN THE CHANNEL, 1512 (By R. Cleverly)

comptroller of the Royal Navy. The duties of Trinity House were to regulate the pilot service, provide lighthouses, beacons, and buoys in dangerous waters, and to examine the qualifications of naval officers. Now that the country possessed a permanent Navy, which it was desirable should be a separate force from the Army, it became necessary to establish a Navy Board, whose duties were concerned with the construction and repair of ships, victualling, etc. Although there was a fixed scale of pay for officers and men, really the Navy for many years was not separated entirely from the land forces.

In the spring of 1513 Sir Edward Howard, with a fleet of 42 sail. again crossed over to France and ravaged the country around Brest. The French had recently enlisted the services of a number of Maltese galleys under Bidoulx, a knight of Malta, whom the French called M. Pregent. The Maltese craft were directly descended from the ancient Greek and Roman galleys. Each had 26 rowing benches, to which were chained nearly 300 oarsmen, mostly slaves, whose existence was one long purgatory. The galley was also rigged with a couple of masts and lateen sails. In the bow were cannon, but it was the sword that the fighting crew chiefly used when they had effected boarding an enemy. It may be thought that these galleys were out of place in a naval fight of the sixteenth century; but the Maltese were waging continual warfare with the Moslem pirates from Northern Africa, and they were most expert in handling their low-lying craft, and at close quarters were terrible opponents.

The English fleet discovered the Maltese galleys lying in a bay into which the shallows would not permit the big English ships to enter. Sir Edward Howard therefore selected one of his own smaller rowing craft, and with some seventy or eighty men drove at Bidoulx's own galley, and when he had grappled with her, sprang aboard her with seventeen of his men. In some manner the two vessels broke apart, and the Maltese found no difficulty in despatching the whole of the English boarding party, whose

dead bodies they flung overboard.

When the English fleet returned home Sir Thomas Howard succeeded his brother as Lord High Admiral, and he beat off Bidoulx, who had crossed over and was ravaging Sussex. Although England and France had agreed to a truce, it did not appear to be binding on Bidoulx, for he again did a great deal of damage on the Sussex coast, including the burning of Brighton, or Brighthelmstone as it then was called. An English arrow robbed the Maltese leader of an eye, and towards the end of the year he returned to the Mediterranean.

In June 1514 was launched the "Henry Grace à Dieu," or the "Great Harry," as she was popularly known. She was of 1500 tonnage, was furnished with four masts, and had two decks. She

has been described as a floating mass of millinery and gilded timber. Her armament consisted of 184 pieces of ordnance, 34 being culverins and demi-culverins, while over 120 were brass or iron serpentines. The guns were mounted on wheeled carriages. In all probability this was the first English ship to be furnished with port-holes, through which to point the guns; heretofore they had been fired over the bulwarks. She carried 260 sailors, 400 soldiers, 40 gunners, 2000 bows for archers, 1500 each of bills and morrispikes, etc. Although the "Henry Grace à Dieu" was rather a noble and imposing ship for her day, she was chiefly for show, and

was laid up the greater part of her time. Ferdinand Magellan, in the service of Charles V of Spain, set out from Seville on 20th September 1519, on a voyage round the world. The expedition consisted of 5 vessels and 270 men. Crossing over to South America, Magellan passed through the Straits that have since borne his name. With the Pacific before him, the explorer had only three ships, one having been lost, and one deserted to return home. In the course of a four months' voyage to the Philippines, Magellan only found two small uninhabited islands, although the Pacific Ocean was dotted with innumerable inhabited The king of one of the Philippine Islands received Magellan very favourably, and the navigator must therefore assist him against a local rival, and during an unequal fight Magellan was killed. The command then devolved on Julian Sebastian del Cano, who set out for the Moluccas, losing a vessel on the way thither, while another was so unseaworthy that she was unable to return until a more favourable season. Del Cano therefore set out for Europe in the "Victoria," and reached Seville on 8th September 1522, after an absence of three years all but eleven days. The vessel, left behind in the Moluccas, was seized by the Portuguese, who resented the Spaniards' attempt to share in the rich spice trade. Only four of the crew contrived to reach home, and thus out of the 270 adventurers only 35 of them were the first circumnavigators of the globe. This voyage was of immense geographical importance; it proved that America was not attached to Asia; it was made clear that the world was larger than had been believed.

Henry VIII actually built forty ships for the Navy, and he purchased almost as many more, some of them being fine examples of Continental building obtained from the Venetians and the Hanseatic League. One of these, the "Jesus of Lubeck," 700 tons, had sickle-shaped bill-hooks at the ends of her yard-arms. When sailing alongside a hostile craft, it was possible to cut her rigging to pieces. This was a very ancient device, but it was now dying out. The English fleet in the main still only went to sea in the spring and summer, but with the increase in size and improvement in sailing qualities, some of our ships of war now patrolled the Straits

of Dover and the Channel all through the winter.

In 1544 Henry was able to test the efficiency of the fleet to which he had devoted so much attention. War broke out with France, and we opened the proceedings by capturing Boulogne after a siege of six weeks. In July of the next year the French king despatched 150 large ships and 60 smaller ones to attack our southern coast, and Henry promptly went down to Portsmouth and personally superintended and expedited the preparations to meet the enemy. When the French appeared off St Helen's (Isle of Wight), some sixty English sail put out to meet them. For the greater part of a day a fierce fight was in progress, and when darkness came on it seemed as though the advantage lay with

the French, thanks to their superior numbers.

On the next day the enemy attempted to land on the island. but the English renewed the fight with such vigour that the French were forced to relinquish all hope of achieving their purpose. Foremost in this fight was the "Great Harry," which at times was bearing the brunt of the action. Another famous vessel was the "Mary Rose," a 60-gun ship, which Sir Edward Howard once described as "the flower of all the ships that ever sailed." Either in the action or just before it the "Mary Rose" capsized during a sudden squall, her lower port-holes having been left open, although they were not more than two feet above the water when on an even keel. There were then no watertight compartments and no bulkhead doors, and the waters of Spithead poured in, and down she went with Sir George Carew and her full complement of men. Only a few hours earlier the King himself dined aboard her. Several unsuccessful attempts were made to raise the "Mary Rose." In 1836 some of her guns were recovered, and one is exhibited at the Royal United Service Museum.

In addition to the provision of ships, Henry VIII accomplished a great deal more for the Navy. He improved and enlarged the dockyards at Portsmouth and Deptford, and established a new dockyard at Woolwich. He fortified Gravesend and Tilbury, and erected castles at Portland, Cowes, Sandgate, Deal, and Dover. Another very important matter to which the King gave grave attention was the question of tactics. "A Book of Orders for the War both by Land and Sea," written by Thomas Audley at the command of Henry, contained detailed fighting instructions, concerning the best disposition of ships, the getting of the weather-gauge, methods of boarding, and the uses of flags for signalling, etc.

The pay of those aboard ships on active service was not on a very liberal scale. A captain was paid about Is. 6d. a day; master, £2 per month; boatswain, 16s. 8d.; master gunner, 10s.; and mariners, 6s. 8d. a month. The rations were $\frac{3}{4}$ lb. beef and $\frac{1}{2}$ lb. of bacon on three days of the week, and four herrings and 2 lbs. of cheese on three other days. On Fridays each mess of four men was served with half a cod, 10 herrings, and 1 lb. each of butter and cheese. Ib.



GUNS RAISED FROM THE WRECK OF THE "MARY ROSE"

of bread or biscuit was supplied daily, and there was an allowance of

beer, or else a mixture of sack and water.

Edward VI was but a delicate boy of nine years old when he came to the throne in 1547, and as he died at the age of fifteen, he had no personal influence in matters of State. The Navy may be said to have been almost at a standstill, although a new dockyard at Chatham was commenced. An experiment, too, was made in sheathing the hulls of ships below the water-line with sheets of lead in order to lengthen the life of the submerged oaken planking. This could not be called a new "invention," for the Greeks and Romans had tried a leaden sheathing in very early times.

In the reign of the late King it had been arranged by treaty that Prince Edward should marry the young Queen of Scotland. The Scots, however, repudiated the contract and made friends with France. The Duke of Somerset, who was Protector of England, despatched an army and a fleet to Scotland in 1547. At Pinkie, near Musselburgh, the Scots were hemmed in between our land force and the sea, so close to the shore that the fleet, under Lord Clinton, was able to use its guns upon the Scottish army with very

considerable effect.

Sir Hugh Willoughby in 1553 endeavoured to discover a northeast passage to Asia, but perished miserably with all his party in Lapland. Richard Chancellor set out on a similar quest, but finding no way round the north of Europe, he entered the White Sea, and then went overland to pay a visit to Ivan the Terrible in Moscow. This was accounted a great feat at a time when Russia was practically an unknown country to Western Europe. It is interesting to note that the whirligig of time has brought Moscow

within fifty hours of London.

The reign of Queen Mary (1553-58) was a short and troublous one, during which nothing occurred to add to our glory, either on sea or land. Only one or two ships were added to the Navy, and these were the last that were launched to the accompaniment of Roman Catholic religious rites. The discovery of America was bringing immense wealth to Spain, and was raising her to the highest pinnacle of greatness. English mariners were envious of the prosperity of the Spaniards, and our merchants and adventurers constantly came to blows with them not only in the Spanish Main, but in other parts, for Spain attached great importance to those supposed rights which Pope Alexander VI had conferred on them. Consequently, it is easy to believe that when Queen Mary announced her intention to marry Prince Philip of Spain, the projected union was not very warmly espoused by the people of England.

When Philip came over to England with a fleet of 150 sail to woo his English bride, he was met by a small English squadron under Lord William Howard, the Lord High Admiral. The



THE EMBARKATION OF HENRY VIII FOR FRANCE

Spanish Prince did not propose to waste any courtesy on an insignificant force of a country for which in his heart he held a profound contempt, and the Spanish ships were passing on as if they had the Channel to themselves. For centuries we had claimed to be mistress of the Channel, and even in times when our naval affairs were not particularly flourishing always insisted upon foreign ships lowering their topsails and dipping their banners as tokens of respect to the English flag. If Philip of Spain imagined that his high rank and the current glory of his country were sufficient grounds for ignoring the customary salute, he was labouring under a great misapprehension. It weighed not with Lord Howard that Philip was a suitor of England's sovereign, and possibly the future master of even England's Navy; and a shot across the Spanish Admiral's bows was a plain intimation that if the long-recognised courtesy was not forthcoming, the bridal embassage might perhaps fail to reach its destination. Anxious not to risk the success of his mission, Philip stifled his rage, and all the Spanish ships formally saluted. And only then did the English guns boom out a welcoming salute to the illustrious visitor to our shores.

The last year of Mary's reign was marked by the loss of Calais, thanks to our interference in a war between France and Spain, which Mary undertook to please her husband, who had left her as soon as he succeeded to the throne of Spain. We had held Calais since the days of Edward III, and in England its loss was viewed as an irreparable blow. Really it was a blessing in disguise. As long as we retained a fraction of French territory there was not likely to be any lasting peace between the two countries; whereas the definite abandonment of English expansion on the Continent would leave us free to devote our energies to the extension of our sea commerce, which was to be the foundation of our vast Colonial Empire.

CHAPTER VI

QUEEN BESS'S SEA-DOGS

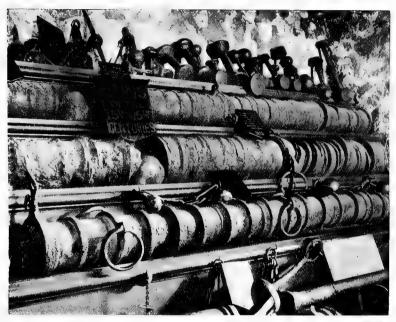
WHEN Queen Elizabeth, the "Lady of the Seas," commenced her reign in 1558, the Royal Navy consisted of only some 30 ships of about 8000 tons all told; although only eleven years had elapsed since the death of Henry VIII, who left so fine a naval heritage to his son. How then had the Navy decreased to so few ships in so short a time?

The real trouble lay in the unsatisfactory methods of building which sometimes were too hurried to allow of good work, and in other cases slowness of building made for the same result. Skeletons, or frameworks, were often left exposed to all weathers for a twelvemonth in order to season the timber, whereas rain and sun, wettings and warpings, often set up mildew and rot before any planks were placed across the ribs. The average outside length of life of a ship built under such conditions was only about ten years, and some, indeed, rotted within almost as many months. were, however, a few notable exceptions, one ship built in this reign, for example, was in active service for more than a century. Some of Henry VIII's ships had been sold out of service, one of 450 tons, for example, built as recently as 1545, Queen Mary sold for £35; the "Henry Grace à Dieu" had been burnt accidentally at Woolwich in 1553.

But whatever the state of Elizabeth's navy, the nation's mariners were brimful of enterprise. They had explored the northern seas suffering untold hardships for little or no reward, while great galleons were crossing the Atlantic from Central America stuffed with riches to pour into the coffers of Spain. Little wonder that the more adventurous English spirits determined to make a bid for a share in the wealth of the West Indies, snapping their fingers at Papal Bulls, and conveniently forgetting the ordinarily recognised rights

of either individual or nations.

In the time of Elizabeth men not infrequently devoted their private means and rendered personal service in advancing what were considered to be State interests, with the tacit understanding that they might serve their own private pockets at the same time; there were venturers, pure and simple, who went out in search of fame or fortune; there were bold buccaneers whose joy in life was to spoil the Spaniards, who were violently hated in England after we broke with the Papal authority; and finally there were our merchant men who sailed in many distant waters in the pursuit of trade and commerce. In all these directions our seamen were gaining knowledge in the rough school of experience that would serve their country well in time of need, even though the Queen



GUNS OF THE FIFTEENTH AND SIXTEENTH CENTURIES IN THE TOWER OF LONDON

showed a disposition to starve and pinch the Navy instead of follow-

ing the example set by her father, "bluff King Hal."

John Hawkins, in 1562, set out for the West on a voyage, not of exploration, but of profit, and adventure he would take as it came. His vessels were three in number, the largest only 120 tons, and men all told, a hundred. With a brutal disregard of fine feeling he first paid a call on the west coast of Africa, where he secured a cargo of slaves, by the sale of whom to the West Indian planters he hoped at least to clear his expenses. On his return voyage he inspected the coast of Newfoundland, and reached home in due course, fairly satisfied with his experiment.

For a second voyage with four ships, Hawkins obtained the use of the "Jesus of Lubeck," referred to in page 68, and repeated his slave-dealing programme. He found slave-catching had its

risks, for upon this occasion in the capture of only ten slaves six of his men were killed and twenty-seven wounded.

Upon his return to England Hawkins was given charge of an expedition that Elizabeth sent to the relief of the Protestants of Rochelle, but with a lull in naval matters he again betook himself to the West Indies with another cargo of slaves, for which he got good prices. During a storm Hawkins put in at the port of St John d'Ulloa, in the Gulf of Mexico. Whilst he was there a Spanish squadron arrived, and the rival commanders agreed to maintain



HAWKINS ESCAPED ASSASSINATION ONLY BY THE VIGILANCE OF HIS MAN-SERVANT

an honourable peace and duly exchanged hostages. While he was dining aboard the Spanish flagship Hawkins escaped assassination only by the vigilance of his man-servant, who seized the miscreant by the wrist.

The Spaniards afterwards treacherously attacked Hawkins on all sides, the "Minion," one of his ships, being boarded by a crowd of Spaniards from one of their ships alongside. The men of the "Jesus" sprang on to the deck of the "Minion" and cleared her of the enemy, after which Hawkins put a shot into the powdermagazine of the Spanish Vice-Admiral's ship and blew her up with her crew of 300.

The gallant Englishman sunk or burnt four of the enemy's ships, and badly damaged their flagship, but he only escaped with two of his own six ships, the "Minion" and a smaller one of 50

tons. The fight made a sad hole in Hawkins' fortune, for which naturally he owed the Spaniards a deep grudge; and a bitter toll

did he take of them for it in later years.

From that time forward John Hawkins commenced to make the most unblushing attacks upon the Spaniards both on land and sea. Apart from his own personal antipathy, Spain brought trouble on her head by her arrogant refusal to acknowledge any competition in trade with the West Indies. English sailors were seized in Spanish ports, immured in dungeons, and sometimes even burnt at the stake. Stories of these atrocities were common talk in English ports, and gave rise to a bitter hatred of everything Spanish. Thus Hawkins was but paying the Spaniards back in their own coin, when he pillaged their settlements and rifled their galleons on the high seas. This bold freebooter simply trampled on the majesty of Spain at a time when the two countries nominally were at peace. So alarming became his depredations that the Spaniards styled him the "Enemy of God," and Philip of Spain sent angry remonstrances to Elizabeth, calling upon her to put an end to these marauding expeditions. She, however, denied either knowledge or consent, but she conveyed to Hawkins an intimation that he had better remain at home awhile.

Secretly Elizabeth approved of the buccaneering expeditions of her seamen; and she well knew that at that time Spain desired peace rather than war. In any case she could not have been displeased with Hawkins, or she would not have made him Treasurer of the Navy, an office of honour which he held for twenty-two years.

But a younger seaman was entering into the fray, namely Francis Drake, who had accompanied Hawkins in his third voyage to the West in 1567. In that desperate fight in the harbour of St John d'Ulloa, Drake was in command of the "Judith," and he too claimed to have suffered heavy financial loss by the perfidy of the Spanish admiral. He endeavoured to obtain compensation by peaceable methods, but obtaining no redress, he sought to recoup himself by desperate exploits, with which in comparison the acts of Hawkins against the Spaniards were but mere pin pricks.

On Whitsunday eve, 1572, Drake sailed out of Plymouth Sound in command of two small vessels. The "Pasha" (70 tons) and "Swan" (25 tons), however, were armed to the teeth like any menof-war, and there is little doubt that Queen Bess had contributed towards their outfit. The crews, all told, only numbered 73 men and boys, and only one man among them had attained the age of thirty. That there was no such word as fear in the leader's vocabulary was shown in what appeared to be his ridiculous plan of rifling the store-houses of the rich Spanish port of Nombre de Dios.

In a secluded little bay near the Isthmus of Panama, Drake fitted together three small boats, which he had brought in pieces

from Plymouth. While engaged in this task, three other vessels put into the bay, one of them English, under Captain James Rause, and a couple of Spanish ships which he had captured. Drake and Rause joined forces and proceeded to Prisoner's Island, where Drake selected 53 men who rowed in four boats to Nombre de Dios, which

they timed themselves to reach at midnight.

All went well with the adventurers, before whom at length lay Nombre de Dios wrapped in darkness and silence; but Drake knew that they were in front of the Spanish guns that would blow them out of the water unless they could be seized with the dawn. As they quickly rowed towards the town, they encountered a boat which had just left a Spanish ship lying in the harbour. Although the Englishmen made a desperate effort to capture the boat and prevent the alarm being given, the Spaniards fled to the other side of the bay where pursuit was useless.

Without delay Drake ran his boats along side the quay and the Englishmen toppled over the Spanish guns. By that time the town had taken alarm, drums were rolling, and the church bell was classified a colling. Drake lad his man into the centre of the

clanging a call to arms. Drake led his men into the centre of the town where they were received by a volley of musketry from a force of Spanish soldiers, upon whom Drake's men fell with such impetuosity, that the Spaniards threw down their arms and fled, bewildered by the darkness and their foes multiplied by their fears.

Straightway Drake led his force to the great bullion warehouse, a few men breaking it open, while the greater number held the market place. The storehouse was packed with solid bars of silver upon which the English seamen gazed with wondering eyes. Drake, however, forbade them to touch it, for he was bent upon looting the storehouse which contained only gold and precious stones.

Meanwhile the soldiers and armed citizens were swarming to the market place, and in face of such numbers Drake's men began to exhibit signs of nervousness. Their leader laughed at their fears and even taunted them to be of good courage, now that he had brought them "to the mouth of the treasure house of the world."

In his first dash upon the town Drake had been wounded in the leg. He had endured the agony of it silently, unknown to his men, whom he was anxious not to dispirit; but now, faint from loss of blood, the intrepid leader suddenly uttered a groan and fell to the ground. The life of Drake was more to his men than all the wealth of Nombre de Dios, and they picked him up and fought their way back to the boats, regardless of his protestations that they should raid the treasure house and leave him to take his chance.

Daylight was at hand, and as the disappointed raiders rowed out of the harbour, the Spaniards were astounded to find what a mere handful of men had stormed their town and put the King of Spain's treasures in jeopardy. Drake speedily recovered from his wound, and commenced to make amends for his failure at Nombre



DRAKE LED HIS MEN INTO THE CENTRE OF THE TOWN

de Dios. From under the very guns of Cartagena he cut out a big Spanish ship, leaving only the abandoned little "Swan" in its place; store ships were pillaged, and coast towns were raided with such unexpected rapidity that the Spaniards almost might have believed they were combating a phantom force.

But in Drake's game of will-o'-the-wisp tropical fever played



DRAKE WAS THE FIRST ENGLISHMAN TO GAZE UPON THE WATERS OF THE PACIFIC OCEAN

far more havoc with his men than ever the Spaniards could accomplish. At length, when he could only muster eighteen healthy fighting men, Drake made friends with some runaway slaves, who undertook to lead him to a place where he could plunder a treasure-laden mule train from Panama. On the way thither, from the top of a watershed, Drake was the first Englishman to gaze upon the waters of the Pacific Ocean. Upon his knees he fell, and with hands upraised to heaven prayed: "Almighty God of thy goodness grant me life and leave once to sail an English ship on yonder sea."

A BATTLE BETWEEN SHIPS-OF-THE-LINE.



A few days later the treasure mule-train was taken by surprise, and the drivers and soldier guard fled in dismay. Drake and his companions loaded themselves with gold and precious stones, while they buried 15 tons of silver to be called for upon some future expedition.

Drake must have fallen in with some unexpected reinforcement about this time, else would succeeding exploits have ranked of the super-human, for he captured Vera Cruz, which he followed up by a second visit to Nombre de Dios, and this time the Spanish treasure-

house had occasion to rue it.

After numerous adventures, sufficient in themselves to fill a volume, during which he had annexed a most miscellaneous assortment of wealth, Drake turned his prows homewards, and dropped anchor in Plymouth Sound on Sunday morning, 9th August 1573, when the people were in church about in the middle of the sermon. The batteries roared out a welcome, an answering salute came from the sea, and most of the worshippers raced out of church to feast their eyes on the ships of the "Queen's Little Pirate," who had re-

turned home safe and sound from the Spanish Main.

Some of Queen Elizabeth's counsellors expressed their candid opinions that Drake was nothing better than a common pirate who deserved hanging, but Queen Bess viewed him in a different light. Although England and Spain were still at peace it was generally known that Philip would declare war at the first convenient opportunity, synonymous with when he was ready to strike a blow once and for all. When that day came England would want Francis Drake and every man-jack who possessed a stout heart and a strong arm to strike a blow for Queen and country. The Spanish Main was proving an excellent training ground for some of the men who would be needed most for weathering the gathering storm.

When Drake was in Panama, and expressed a desire to sail on the Pacific Ocean, John Oxenham, one of his captains, vowed to

accompany his leader if ever the opportunity came.

In 1875, however, Oxenham decided to steal a march on Drake. Landing on the isthmus, he launched a pinnace on a river that flowed into the Pacific, and, reaching the ocean, he attacked and captured a couple of Peruvian vessels that contained no little treasure. It was a dearly-won victory, for Oxenham was pursued

and captured, and at Lima was put to death for piracy.

A year later Martin Frobisher endeavoured to discover the North-West Passage in two small vessels of 20 tons each. He was the first Englishman to visit Greenland, and he discovered the bay which is still named after the hardy explorer. In the following year he sailed again on a similar quest. Upon this occasion he had the Queen's ship "Aid," 200 tons, and Queen Elizabeth subscribed £1000 towards the expenses. In yet a third voyage a Queen's ship

of 400 tons and nearly a dozen smaller vessels were employed. The crews numbered 150 men, and they were accompanied by 120 pioneers. Although these expeditions were far from fruitless, the North-West Passage jealously kept its secret.

With endless daring exploits to his credit Francis Drake was far from satisfied. With becoming modesty he believed that there were crowds of his seamen compatriots who would acquit themselves equally well, given his opportunities. For Englishmen to fight



MARTIN FROBISHER

and win he considered was but a normal achievement, whereas he desired to do something out of the common, to accomplish some feat that no Englishman had yet attempted.

Drake's thoughts often travelled to his one thrilling sight of the Pacific Ocean, that "Golden Sea" across which no English

the Pacific Ocean, that "Golden Sea" across which no English prow had yet cut its way. He decided that in his next venture to tap the "Treasure of the World," he would set about the task in an entirely new way. Instead of rifling the Spanish store-houses on the Atlantic that contained wealth drawn largely from Peru, he would sail round the southern extremity of the continent, then pass northwards along the coast of Chili, and attack Peru itself. The Spaniards had not thought it necessary to fortify the Peruvian

ports, for it had never been considered that the English buccaneers would dare to pass through the Straits of Magellan and approach them from the south.

Nevertheless such was Drake's plan, and he proceeded to fit out an expedition. His own ship was the "Pelican" (120 tons), and with her went the "Elizabeth" (80 tons), "Marigold" (30 tons), and the "Benedict," a kind of pinnace of 12 tons. All their crews only amounted to 163 men and boys. On 15th November 1577 Drake set sail from Plymouth, ostensibly bound for the West Indies. The Spanish Ambassador in London heard of the expedition, and when he learnt that it was commanded by Francis Drake, he at once informed his royal master. Philip of Spain guessed that any expedition of Drake's would spell trouble, and forthwith sent word to the colonial forces in the West Indies to sink every English ship and hang every English sailor upon whom hands could be laid. If he had sent word to Peru the warning might have served some purpose but—

From the very commencement of the voyage Drake was annoyed and a little alarmed by the insubordination of Thomas Doughty, a former secretary of Sir Walter Raleigh, who commanded one of the smaller vessels. On the coast of Patagonia Doughty was court-martialled and executed for treason. His vessel was burnt and the crew distributed among the other ships. Encountering fearful storms, Drake burnt another vessel rather than lose men by her foundering. A little later, indeed, the "Marigold" went down,

and her crew with her.

It took Drake three weeks to get the "Pelican" and "Elizabeth" through the 70 miles of the Straits of Magellan; and then, owing to some misunderstanding the two vessels got separated, and Captain Wynter, in command of the "Elizabeth," turned his ship homeward.

While sailing along the coast of Peru Drake called at an island to obtain supplies of meat and grain. The Indian inhabitants received the white men very courteously, and made them presents of fruit and sheep, and various other stores the Englishmen obtained by way of barter. The next morning Drake and a party went ashore again, and fell into an ambush of some five hundred natives. Scarcely a man of the party escaped wounds from the arrows that were showered upon them, and the leader himself was shot in the face, under his right eye.

Drake, having changed the name of his vessel from "Pelican" to the "Golden Hind," next made for Valparaiso, where he hoped to meet Captain Wynter, but instead of the "Elizabeth," he found a big Spanish galleon, which he captured and secured a rich haul of gold and wine. At Tarapaca Drake seized the silver which two mule-trains had just brought down to the coast. At Lima the harbour was full of Spanish ships, every one of which was searched

for treasure. As he sailed along the coast Drake pillaged ship after ship. Finally, off Cape San Francisco, he fell in with a veritable floating treasury of gold, silver and precious stones, all of which was joyously transferred to the "Golden Hind." Never before had an English vessel carried so much wealth, and Drake declared himself to be "greatly satisfied."

At that point the daring seaman put on his considering cap, and weighed his chances of getting home. He decided that to

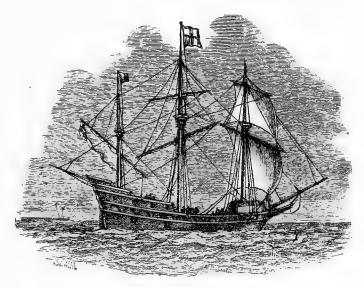


SCARCELY A MAN OF THE PARTY ESCAPED WOUNDS

return via the Straits of Magellan would afford the Spaniards an excellent chance of intercepting him; Cape Horn was unknown, and Tierra del Fuego was reckoned part of a great imaginary southern continent called "Terra Australis."

Drake decided to endeavour to return home by way of the North-West Passage, although no mariner had yet discovered it. He therefore sailed northwards to California, of which he took possession in the name of Queen Elizabeth, not knowing that the Spaniards had already preceded him. Still voyaging northwards, the "Golden Hind" reached 48° north, and there encountered such cold weather that the rigging was frozen. As this evidently was only a slight foretaste of the rigours lying before him, Drake turned southwards with the daring resolve to proceed home by way of the East Indies and the Cape of Good Hope. It meant a voyage of 20,000 miles, the greater part across waters where no English ship had been sailed before; and of which Drake possessed no chart, having to rely on his own genius, the courage of his crew, and the kindness of Providence.

Sailing across the Pacific, Drake made the Moluccas in safety, thence on past Java, and across the Indian Ocean to the Cape of Good Hope. From that point it was plain sailing straight for home. On 26th September 1580, the "Golden Hind," battered by wind and wave, worm-eaten, clogged with barnacles and seaweed, and



THE "GOLDEN HIND"

bearing the marks of many a brush with the enemy, staggered into Plymouth Sound, her proud commander having achieved the honour of being the first Englishman to circumnavigate "this nether globe."

Drake's famous voyage round the world thus was not a preconceived plan, but was the result of circumstances, not that it detracted a jot from its merit as a feat of seamanship. Drake's voyage made nautical history. He had struck Spain in the very heart of her American possessions; he was the first Englishman to navigate the Pacific and Indian Oceans; and to visit those Oriental islands from which Portugal was drawing untold riches.

Hitherto, however much Queen Elizabeth had gloried in the feats of Francis Drake, she had never openly demonstrated her favour. She possessed a very full measure of Tudor sagacity, and

felt that this champion of seamen could no longer go unrecognised, no matter what the King of Spain's opinion on the subject. The "Golden Hind" was hauled on to the slips at Deptford, and Queen Bess and her Court went to dine aboard. When the dinner was concluded Drake knelt before his sovereign, and when she had touched his shoulder with his own sword, he rose Sir Francis. The Spaniards had long awarded him a very different title, namely, "The Master-Thief of the New World," and a very honourable appellation did the gallant sea-dog account it.

During Drake's voyage round the world other English navigators had not been idle. In 1878 Sir Humphrey Gilbert, who was Sir Walter Raleigh's half brother, had annexed the Bahamas, and had attempted to plant a colony in Virginia. In 1583 Gilbert took possession of St John's harbour, Newfoundland. Of the five vessels engaged in the expedition the "Golden Hind" was one and the "Squirrel," of only 10 tons, was the smallest. While exploring the Newfoundland coast Gilbert sailed in the smallest ship because she could enter even shallow creeks. On the return home the leader elected to remain in the "Squirrel," which foundered in a storm, and those aboard her were seen no more.

After receiving his knighthood Drake decided to devote himself to the Royal Navy, in which little of importance had occurred for a considerable time. The Spaniards had put a price of £40,000 upon the head of Drake, which stirred up in the seaman a wild desire to prove to King Philip that the estimate of him was put at

too low a figure.

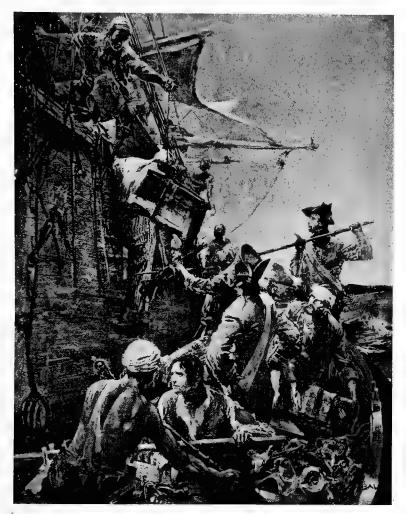
Affairs between England and Spain were rapidly approaching a crisis. Lord Charles Howard of Effingham, who had succeeded his father as Lord High Admiral, Sir Walter Raleigh, Sir Francis Drake, and John Hawkins desired to raise the sea power of England, which was absolutely necessary in view of the fact that Spain was claiming to be the foremost military and naval power in the world. But owing to unscrupulous Court intrigues Queen Elizabeth turned a deaf ear to her naval advisers, and even put the fleet upon a peace footing. This, too, in face of Spain preparing a huge armada, whose only special object could be an invasion of England.

Shortly a Spanish spy overstepped the mark. He was seized and put upon the rack, and under torment he disclosed the plans of Philip, which embraced a general uprising of the Roman Catholics in England, which would be the signal for a Spanish invasion, in

which it was hoped France and Scotland would join.

Queen Bess promptly ordered the Spanish Ambassador to be packed out of the country, and gave Drake permission to make himself generally unpleasant to Spain. Although he would have preferred more time for his preparations, Drake cleared from Plymouth in September 1585, while yet some of his ships were not victualled,

lest his fickle mistress should change her mind. His fleet consisted of four Queen's ships and sixteen armed merchantmen chiefly used



LOOTING A TREASURE SHIP

as transports, having on board about 2300 troops. Drake flew his flag in the "Elizabeth Bonaventure," of 600 tons, with Thomas Fenner as his flag-captain; the "Aid," 250 tons, another Queen's ship, was under Captain Edward Wynter. Vice-Admiral Martin Frobisher was on the "Primrose," 200 tons, a London merchant-

man. Frobisher had not yet joined the Royal Navy, but was given a command at the request of the merchants, who were finding both money and ships for the expedition. Two-thirds of any booty were to belong to the merchants; the remaining third was to be

divided among the men employed in the venture.

Only recently King Philip had detained some English corn ships in the port of Vigo. The "Primrose" was one of them, but she escaped, thanks to the smartness of her skipper. Drake made straight for Vigo, where he forced the inhabitants to provide the stores to complete his victualling. From Vigo he sailed westwards, going out of the direct course in order to call at the Cape Verde Islands, where he had a score to wipe out. Not long previously some English sailors had been captured and murdered there; and Drake's memorial took the shape of looting

St Iago.

Across the ocean sped the English fleet, which spent Christmas at St Christopher, where Drake refitted his ships and refreshed his men. Then something happened! The oldest and most famous city in the West Indies was San Domingo, founded by Christopher Columbus, his brother Bartholomew being its first governor. Without warning Drake attacked the city and utterly dismantled the greater portion of it, and spared the rest only on payment of a ransom of 25,000 ducats. In this port were found a hundred English sailors whom the Spaniards had employed as galley slaves. These poor wretches were a useful addition to Drake's force, for their suffereings had instilled them with a poisonous hatred of all things Spanish, and imbued them with a ferocious desire to avenge their wrongs—and such men would count heavily in a fight.

After holding San Domingo for a month the English fleet next appeared off Cartagena, the capital and richest city of the Spanish Main. The very insolence of the attack appeared to hypnotise the Spaniards, who put up a very poor fight, and could do nothing to prevent Drake stuffing his ships with all kinds of booty. The English held this city for a month also, and exacted a large ransom before leaving. In addition to kind and coin, up to this time the

spoils included 240 pieces of ordnance, most of it brass.

Drake now decided to return to England after consulting his military commanders, for not only were the men being ravaged by fever, but his ships would hold no more loot. The fleet sailed home by way of Florida, calling at our colony of Virginia to furnish the colonists with stores, or to leave them a ship, or to take them home, if they desired it. The settlers decided to accept the last, and thus the first English settlement of Virginia was abandoned.

During this great expedition 750 men were lost, chiefly by sickness, the remainder arriving in safety at Portsmouth on 28th July 1586. In reporting his arrival Drake expressed the pious regret that. "for reasons best known to God," by only half a day on the

return voyage had he missed falling in with the Spanish platefleet. On the whole he was satisfied with the results, modestly describing his work as merely "a great gap which had been opened very little to the liking of the King of Spain." Drake's operations had really hit the Spanish Colossus a staggering blow. It was patent that Philip's claim to maritime supremacy rested upon very insecure foundations. Spanish credit went down with a bound; the Bank of Seville suspended payment; and when Philip endeavoured to raise a loan of half a million ducats he obtained it only with the greatest difficulty.

Drake's wholesale depredations confirmed Philip in his determination to invade England. It was only the temporary blow to Spanish credit that prevented the angry monarch from at once utilising his Great Armada. For the time being Philip merely demanded from Elizabeth an explanation of Drake's forceful foraging in the Spanish Main. She splendidly dissembled and practically swore that she was no party to the expedition; while Drake went forward with other preparations that boded little good

to Spain.

There followed months of diplomatic evasions and protestations of Spain's real friendliness, and then Elizabeth's eyes were opened by a secret despatch stolen from Spain, in which it was shown beyond the shadow of a doubt that the Great Armada was being prepared solely for the invasion of England. With this plain menace to her crown in front of her, Elizabeth was prepared to listen to her naval advisers. It was Drake more than any other whose opinion carried the day. Howard, Raleigh, and Hawkins affirmed that it was on the sea and not on land that England must be defended, but Drake went further: he maintained that England's safety lay not merely in defence even on the water, but in boldly attacking Spain and thus preventing the Great Armada even from starting on its errand.

It was therefore decided that Drake should lead an expedition to Spain, there to burn, sink, and destroy, and do everything that was humanly possible to hamper the coming together of the various divisions of the Armada which Philip was fitting out. Drake, no longer a semi-licensed pirate, hoisted his flag on the "Elizabeth Bonaventure"; other royal ships were the "Golden Lion," 500 tons; "Dreadnought," 400 tons; and "Rainbow," 500 tons. To these were added 22 more armed merchantmen. The necessary funds for the expedition were provided for in part by the Queen, the remainder being guaranteed by merchants who would share in the

proceeds of the plunder which might be secured.

Drake was in a perfect fever of unrest until he set sail from Plymouth on 2nd April, 1587. Up till the very last moment he feared that intriguers at Court would induce the Queen to dally with the imminent danger with which England was threatened. His fears



were justified, for a Queen's messenger dashed into Plymouth with despatches ordering the admiral to delay his sailing. But Drake already had disappeared, and in those days there was no ordinary telegraph, let alone wireless, to recall him to port. On the 29th of the month he swooped down upon Cadiz harbour, where lay nearly a score of great ships without their crews, fitting out for the invasion of England, together with a number of smaller craft, some of them being French

It was 5 o'clock in the afternoon when Drake led his ships into the harbour. Seven Spanish galleys immediately attacked the daring intruders. These were formidable fighting vessels, 150 feet long, propelled by 60 oars, each worked by half a dozen chained slaves. The English ships opened such a terrific fire on the galleys that they drew off to the end of the harbour, where some of the

other shipping had taken refuge.

Drake brought his vessels to anchor well out of reach of the guns of the forts, and at once attacked the nearest ships; a 1000-ton galleon was speedily sunk, and a 1400-ton wine carack was next looted and burnt. All through the night Drake and his men were boarding and capturing ships, and when they had been rifled they were set on fire and sent drifting before the wind to carry destruction to some of the helpless shipping at the far end of the harbour.

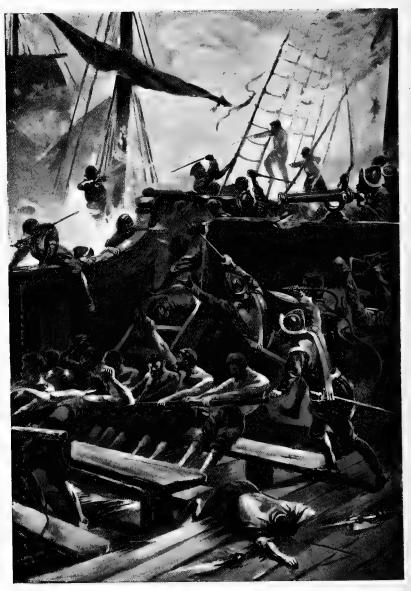
When daylight came Drake proposed to get out to sea, but the wind that had carried the English ships into the harbour still blew in the same direction. The Spanish galleys again came to the attack, and the slaves at the oars were whipped cruelly in order to get to close quarters. In not a few cases the galley slaves were English themselves, and terribly anxious to get alongside Drake's ships in the hope that the galleys would be captured, which would put an end to their slavery. The English gunners so shattered two of the galleys that they foundered; and the other five were in a pitiable plight—some of their guns dismounted, oars shot away, and their decks running with blood.

Not until next morning was the wind favourable for getting out of the harbour. As the English ships made their way to the open sea the Spanish forts were again busy, but they worked little damage

to the vessels that were leaving a sorry scene behind them

Drake sent home a grimly laconic despatch, merely intimating that he had "singed the King of Spain's beard in Cadiz." Our folk in England did not for some time realise what singeing entailed; but King Philip knew that it meant the total destruction of some 12,000 tons of good shipping, which he had lost at one blow.

There was no Spanish port that was not in a state of terrible funk, for Drake was raging up and down the coast attacking strongholds and scuttling any Spanish timbers that came his way. At Cape St Vincent he plundered a rich monastery that stood on the headland, and hammered the neighbouring Castle of Sagres. He



ALL THROUGH THE NIGHT DRAKE AND HIS MEN WERE BOARDING AND CAPTURING SHIPS

captured the castles of Valiere and Udiche. Philip had conquered Portugal in 1580, and thus in Lisbon harbour there lay a great Spanish fleet fitting out under Santa Cruz, who was the reputed greatest sea-captain in Europe. In any case after the direful experience of Cadiz, Santa Cruz had well fortified the entrance to the Tagus. Fortunately for Spain Drake could not get among the forest of masts in the harbour, and Santa Cruz was too discreet to tempt fate by coming out. For the time being Spain was paralysed, while Drake proved two great principles that have played no inconsiderable part in the building up of the British Empire: first, that a maritime nation that would be great has no frontiers save its enemies' coasts; second, that the most effective method of defence is to be prompt and vigorous in attack.

On his way home Drake made a capture of far-reaching importance, for he fell in with the "San Felipe," King Philip's own treasure-ship, containing riches to the tune of more than a million sterling. But the "San Felipe" was of more than immediate value. She had come from the East, not the West, and among Drake's loot were account-books and documents that disclosed all the secrets of Spain's East Indian trade, which had come to her with the annexation of Portugal. For the first time the English recognised that there was wealth incalculable to be had almost for the asking in the East, whereas English prows had almost invariably

been turning to the West.

Although Drake had wreaked such damage to Philip's shipping, Spanish wealth would enable new ships to be furnished with all speed. The coming to England of the Great Armada was only postponed, for come it would, and it behoved England to make her preparations in the little time that remained to her. Yet Elizabeth again showed a desire to temporise. She even reprimanded Drake for too great a zeal on the Spanish coast. The English war party implored and swore, while they pointed out that in the Netherlands lay the Duke of Parma with 30,000 Spanish troops destined for England, and the whole Spanish coast continued to

ring with warlike preparations.

Elizabeth could not be persuaded to take further offensive measures against Spain. But she did call upon her people to stand by her in the coming hour of need, and noble was the response to her appeal. Philip had been led to believe that the persecuted Catholics in England would welcome him as a deliverer, whereas they volunteered to stand shoulder to shoulder with their Protestant countrymen to defend their hearths and homes against the foreign invader. Merchants offered ships ready manned and equipped with powder and shot. Thus in a remarkably short time 130,000 men were mustered in different parts of the kingdom. Fortifications were erected at the mouth of the Thames and elsewhere, and stationed in the Channel was every ship that was fit for service.

England was waiting in anxious expectation for the news that the enemy was in sight. The country was agog from Land's End to Berwick. All along the coasts, and on the top of every height inland, were beacons only awaiting to be lighted to blaze throughout the land the signal that the peril had come upon us, and that our fate hung in the balance.

CHAPTER VII

ENGLAND'S PERIL

It is often wrongly asserted that Philip II of Spain vaingloriously styled his fleet "The Invincible Armada," whereas, its official title was only "La Grande Armada." The Spaniards had hoped to assemble the great fleet at Lisbon in February 1588, but in that month death robbed them of Santa Cruz, their greatest admiral, and the one man in Spain fitted to lead the enterprise. Strangly enough Philip passed over many good sailors and soldiers, and for the new Commander-in-Chief selected the Duke of Medina Sidonia, who was not greatly experienced in warfare either on sea or land. Probably the monarch thought that the promotion of any one of the lieutenants of the dead admiral would lead to jealousy on the part of those overlooked; while the appointment of a man from outside the squadron commanders, and the greatest noble of Spain to boot, would be likely to still all rivalries and dissensions. The King was quite aware that Medina Sidonia was a figurehead rather than an admiral, but he would serve until the Duke of Parma was on England's threshold, and then, with Parma in supreme command of the Spanish operations, all would be well.

So little was Medina Sidonia's heart in the high honour forced upon him that he jumped at any excuse for delay, and it was not until 30th May that the Armada set sail. Off the north-west corner of Spain the great fleet was dispersed by a storm. Medina Sidonia with a portion of his ships ran for shelter to Corunna, a dozen put into Vivers, some were at Gijon, and others at Santander; but even a week after the gale there were still 35 ships unaccounted for, although eventually every one straggled back to their depressed and disheartened leader. Not until 22nd July were badly needed repairs effected and the Armada again on its way; but it was short of several good ships that had to be left behind.

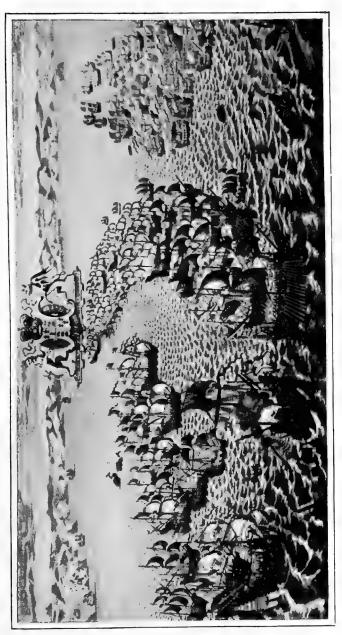
It must have seemed to the Spaniards that the very fates had enlisted themselves in England's service, for in the Bay of Biscay a furious two days' storm again played skittles with their ships. The general damage was not so serious as before, but sails, spars, and rigging suffered severely. One galley was lost and three others returned to Spain. Off Corunna the "Santa Aña," the flagship

of Recalde, the second in command, had lost her mainmast, together with other serious damages; she had been patched up, but was now in such a decrepit state, that she had to be abandoned after she had made Havre with the greatest difficulty. For a time Medina Sidonia feared that he had lost forty ships, until news reached him that they had made for the Lizard, and thither he steered to pick them up, and the great Armada entered the Channel, the Spaniards thankful to leave the Bay of Biscay behind them, but unable to gauge what lay on the knees of the gods ahead of them.

At this point we may survey the Great Armada as it wallowed up the Channel, and test the wild rumours that long had been current concerning the number of the Spanish ships, their enormous size, and the immense army that was aboard them. When Medina Sidonia left Lisbon he commanded 130 ships manned by 8050 sailors, 2088 oarsmen, and carrying 19,290 soldiers, but making allowances for losses by weather and sickness, it is doubtful if more than 120 ships with 24,000 men reached our shores. There were only 7 vessels of more than 1000 tons burden, and only 14 exceeded 800 tons. Most of the effective ships were galleons, or armed merchantmen, which, as stated in earlier pages, had to carry guns to protect them from pirates. As the dangers of voyaging across wide waters increased, so the armaments were made heavier; and when these vessels were placed on a war footing it was not difficult to transform them into tolerably good men-of-war. The whole of the Grand Armada mounted 2630 guns.

The Spanish fleet contained 65 galleons or "great ships," and although their exaggerated castles at fore and stern made them appear of enormous size, many of them were under 500 tons. They were heavily masted and carried a great spread of canvas. In many cases the sails were embroidered or painted, were decorated with great red crosses, or showed rich armorial bearings and heraldic devices. These vessels were well adapted to traffic in the comparatively calm seas of the tropics, but they rolled badly and were perfect hogs in the broken seas of the north. Nevertheless, a "great ship " in full sail was a brave and inspiring sight. The armament of a galleon was not heavy, and even the "Regazona" (1249 tons), the biggest of them, only mounted 30 guns, and carried 80 sailors and 344 soldiers. The soldiers aboard all the ships were chiefly arquebusiers, who could maintain a heavy fire of small arms from the bulwarks and fore and stern castles upon the enemy at close quarters. Boarders practically could only enter by way of the low waist, and thus were laid open to a cross fire from fore and aft.

The real fighting ships were the galleys and galleasses. The galleys were similar craft to those with which M. Pregent plagued our southern coast in 1513. In this case they were chiefly Portuguese vessels of very low freeboard; they were two- or three-masted, but to their considerable sail-power was added a single



(From the engraving of 1739, by Morant and Pine, of the tapestry in the old House of Lords) THE SPANISH ARMADA COMING UP THE CHANNEL-THE "SAN SALVADOR" ON FIRE

row of long oars on each side. Being thus of great speed with the wind, and enabled by their oars to move even in a calm, they were a terror to sailing craft in an inland sea. Galleys usually fought abreast, so that their rowers should not be liable to a raking fire. Across the fore-deck was a strong breastwork to shelter three or four light guns which fired directly ahead, while there were one or two guns aft to check a stern chaser by bringing down her spars and sails.

The galleasses, of which there were only four, were the most formidable fighting ships. They were three-masted, and were particularly full and round in the bow. Their breadth was so out of proportion to length, that they were really only slow and unwieldy platforms for guns, of which they carried fifty. In addition to the ordnance behind the ports on the gun-deck, there were lighter guns on the bulwarks and the fore and stern castles, and on the after-part of the forecastle and the fore-part of the poop there were swivel guns for repelling boarders. Owing to the high deck, the plunging fire of a galleass was greatly dreaded by lowerbuilt craft. Under the gun deck were 12 to 15 oars, or sweeps, on each side. With as many as 300 rowers, working in short reliefs, the vessel could make good speed and work in conjunction with even the lighter galleys.

In addition to galleons, galleys, and galleasses, there were 23 wreas, store and transport ships, not a few of them 500 tons or more, and mounted with light guns; and finally there were zabras, brigs, and fishing boats mostly under 100 tons, used chiefly as tenders, and

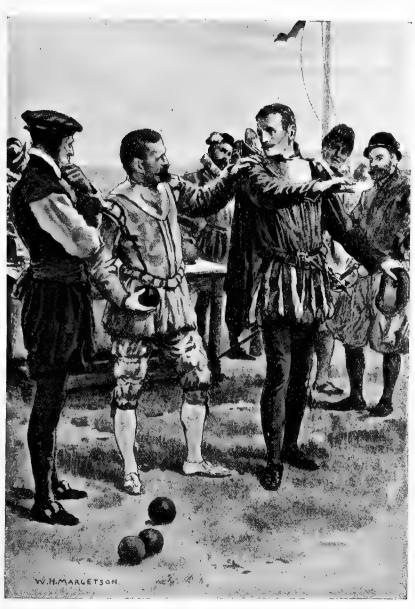
all armed with small guns.

The total burden of the whole Great Armada was a little short of 58,000 tons, or no more than the tonnage of only two of our latest battleships, and, indeed, only a little more than the tonnage of several single leviathan passenger steamships that ply across the Atlantic to-day.

On the afternoon of 19th July, the captains of the English warships were engaged in a game of bowls on Plymouth Hoe in full sight of the beautiful waters of the Sound. Let Charles Kingsley describe some of the men who were playing in this famous

game, or stood watching the players:-

"See those five talking earnestly. Those soft long eyes and pointed chin you recognise already; they are Walter Raleigh's. The fair young man in the flame-coloured doublet, whose arm is round Raleigh's neck, is Lord Sheffield; opposite them stands, by the side of Sir Richard Grenville, a man as stately even as he, Lord Sheffield's uncle, the Lord Charles Howard of Effingham, Lord High Admiral of England; next to him is his son-in-law, Sir Robert Southwell, captain of the "Elizabeth Jonas." But who is that short, sturdy, plainly-dressed man, who stands with legs a little apart, and hands behind his back, looking up, with keen grey eyes,



CAPTAIN THOMAS FLEMYNG RACED ON TO THE HOE TO ANNOUNCE THAT HE HAD DESCRIED THE SPANIARDS OFF THE LIZARD

into the face of each speaker? His cap is in his hands, so you can see the bullet head of crisp brown hair, and the wrinkled forehead, as well as the high cheek-bones, the short, square face, the broad temples, the thick lips, which are yet as firm as granite. A coarse plebeian stamp of man: yet the whole figure and attitude are those of boundless determination, self-possession and energy; and when at last he speaks a few blunt words, all eyes are turned respectfully

upon him—for his name is Francis Drake.

"A burly, grizzled elder, in greasy, sea-stained garments, contrasting oddly with the huge gold chain about his neck, waddles up, as if he had been born, and lived ever since, in a gale of wind at sea. The upper half of his sharp, dogged visage seems of brick-red leather, the lower part of badger's fur, and as he claps Drake on the back, and with a broad Devon twang shouts, 'Be you a coming to drink your wine, Francis Drake, or be you not?' saving your presence, my Lord; the Lord High Admiral only laughs, and bids Drake go and drink his wine, for John Hawkins, Admiral of the port, is the Patriarch of Plymouth's seamen, if Drake be their hero, and says and does pretty much what he likes.

"In the crowd is many another man whom one would gladly have spoken with face to face on earth. Martin Frobisher and John Davis are sitting on that bench smoking tobacco from long

silver pipes."

The pay of the seamen had now been increased to 10s. per month, and on four days of the week each man received 2 lbs. of

beef, and the beer allowance was now I gallon per day.

The English fleet consisted of 34 Queen's ships, and 163 armed merchantmen, some of the latter, however, being very small and of little use in actual fighting, as shown by the total burden of the whole fleet only amounting to 29,800 tons. Our seamen totalled about 16,000. Our guns only numbered about half of those in the Armada, but they were generally of heavier calibre and infinitely better served. The main body of the English fleet, to the number of 90 sail, was stationed at Plymouth, the remainder having been detached to serve off Dover to prevent the Duke of Parma from carrying out any offensive movement.

Lord Charles Howard of Effingham, Lord High Admiral, was in supreme command. Unlike Medina Sidonia, he had seen considerable service; he was the son of the Howard who, thirty-eight years earlier, had compelled Philip of Spain to dip his flag in the Channel when on a visit to Queen Mary. In addition to his own knowledge and experience, he had the advantage of the advice of that remarkable quartette—Drake, Hawkins, Frobisher, and Fenner. Howard's flagship was the "Ark Royal," which was originally built for Sir Walter Raleigh, who sold her to the Queen for £5000. She was of galleon type, 800 tons burden, and four-masted. She had three tiers of gun ports, and also ports in the stern. Her armament

consisted of 4 cannon or cannon royal, 4 dcmi-cannon, 24 culverins and demi-culverins, and 12 smaller guns for close-quarter fighting

and repelling boarders.

It is difficult to classify the ordnance of the sixteenth century with any exactitude, as size and weight and even names varied considerably according to their different makers. "Great cannon," throwing shot varying from 24 to 48 lbs., were seldom mounted on shipboard. Generally the heaviest guns on ships were "demicannon (30-pounders). Cannon-perier were 24-pounders; culverins were 17-pounders, and demi-culverins, 9-pounders. Among the lighter guns, which were the quick-firers of those days, were the saker, minion, falcon, falconet, fowler, etc., and these ranged from 6-pounders down to what were only big muskets mounted on swivels, and throwing a ball of only a few ounces.

Sir Francis Drake, Vice-Admiral, flew his flag in the "Revenge," of 500 tons and 46 guns. Of the latter 34 were in the main battery, and only a dozen were of the lighter types. This famous ship was built on Thames side; her oak timbers came from the forest of

Norwood, about where the Crystal Palace now stands.

John Hawkins, Rear-Admiral, was on the "Victory," of 694 tons and 42 guns. This ship was the first of a famous name in the Navy, and figured prominently in later naval history. She was renamed "Prince Royal" by James I; she was the "Resolution" of the Commonwealth; and the "Royal Prince" of the Restoration. In the year 1666 she was burnt when fighting against the Dutch; and was the last on the sea of the ships that fought against the Armada.

Martin Frobisher was in command of the "Triumph," of 1100 tons and 42 guns, 32 of them being of heavy calibre. She was the largest vessel in the English fleet, and was manned by 500 men. She was only about 50 tons less burden than the two biggest Spanish warships, the "Gran Grin" and the "Rosario," the "Regazona," the biggest of all, being only a merchantman of 30 guns. As typical of the difference in armament between the English and Spanish ships of similar tonnage, the "Rosario," when she was captured by Drake, was found to mount 41 guns, although built for 46, but only 14 of them were anything like heavy pieces.

Lord Thomas Howard, cousin of the Lord High Admiral, was captain of the "Golden Lion" (500 tons and 40 guns), and Lord Sheffield was captain of the "White Bear" (1000 tons and 50 guns). Sir William Winter commanded the "Vanguard," which was built at Woolwich only two years earlier; she had a burden of only 500 tons, but she carried a particularly heavy armament, namely, 32 guns of large calibre in her main battery, and 22 lighter ones. The "Rainbow," a sister ship, was the flagship of Sir Henry Seymour.

The "Nonpareil" (500 tons) was another vessel heavily armed with 52 guns. She was commanded by the veteran Thomas Fenner,

who had served under Hawkins in the West Indies. In 1568, off the Azores, in the "Castle of Comfort" (400 tons), single-handed, he beat off a Portuguese squadron of seven ships.

A remarkably good ship, one of the best in the reign of Elizabeth, was the "Dreadnought," under George Beeston. She was of 400 tons, and mounted 16 heavy guns, 8 lighter ones, and 18



LORD HOWARD OF EFFINGHAM
(From an engraving by Houbraken after Jucchers)

quick-firers. Her crew consisted of 140 seamen, 30 gunners, and 80 soldiers. On the English ships the seamen easily outnumbered the soldiers, which was the reverse on the Spanish ships. The great number of soldiers in the Armada was a source of weakness rather than strength to Medina Sidonia, and for the purpose of meeting the English tactics soldiers were not worth their keep. The armoury of the "Dreadnought" contained 80 arquebuses, 25 bows, 50 arrow sheaves, 30 pikes, 60 bills, 40 corselets, or breast-plates for pikemen, and 80 murions or helmets.

While that famous game of bowls was in progress on the Hoe, the "Golden Hind" came bellying into Plymouth Sound. Her captain, Thomas Flemyng, tumbled into a little boat, which was rowed furiously to land. On to the Hoe he raced to announce that he had descried the Spaniards off the Lizard, coming up the Channel with a fair wind. The news caused no panic, and John Hawkins persuaded the players to finish their game, as there would be "plenty of time to beat the Spaniards afterwards." It is often asserted that Captain Flemyng commanded a privateer, and was guilty of many misdeeds on the high seas, but he did honest work that day; and for his timely service he was afterwards rewarded with a pardon and pension. If that story were correct, it would be a poor compliment to Lord Howard's watchfulness. The "Golden Hind" was a scouting pinnace, and thus the news of the Spaniards' approach was not mere chance work.

The Duke of Medina Sidonia was acting under the strictest orders, which had been drawn up in Spain for the conduct of the expedition, and from which he was not to deviate. He was to sail up the Channel, and even if the English ships offered fight, he was to sail on and make Dunkirk, where he would take aboard the Duke of Parma's great force. The Great Armada was then to enter the Thames, land the troops, and enforce the fullest submission of England. Theoretically these arrangements were perfect, but unfortunately for Spain the English methods were intensely

practical and made sad work of schemes on paper.

If Medina Sidonia had been allowed to exercise the judgment of his most capable commanders, he would have sailed into Plymouth Sound and engaged the enemy forthwith; and if he could have smashed up the English fleet, the remaining part of the pro-

gramme could have been carried out at his leisure.

Lord Howard of Effingham was occupied until noon on Saturday in working his ships out of harbour, for the wind was unfavourable, and it meant sheer pulling; and if the Spaniards could only have swooped down on Plymouth at that juncture. the English fleet might have been caught half in and half out of harbour.

On Saturday night after dark Howard set sail due south with about sixty of his ships, and, with the wind abeam, crossed the front of the enemy's fleet. When he was sufficiently well out, he changed his course, and got the advantage of the weather gauge. Thus on Sunday morning the Spaniards found their enemy not ahead as they had expected, but bearing down with the wind to the attack.

The Spanish fleet was not in crescent formation, as asserted in many popular narratives, and apparently borne out by the famous tapestries that were in the old House of Lords. The force was in squadrons or groups that would come into action as convenient

opportunities occurred, the captains in each group supporting each other as the necessity arose.

Soon the red flag, the signal for battle, was run up to the mainmast head of the "Ark Royal," and appropriately enough, a little English pinnace, the "Disdain," fired the first shot at one of the nearest "great ships." Standing across the rear of the Spaniards, Howard poured a broadside into the "Rata Coronada" (820 tons and 35 guns), creating havoc on her crowded gun-decks, and passed on to serve other vessels similarly; while other English ships followed their leader's example with telling effect. At the outset it was evident that the smaller English vessels could outsail their opponents. The English guns, too, were not only as a rule heavier, but handled with greater skill than the foreign ordnance. The Spaniards, indeed, were indifferent gunners, and much preferred the old boarding tactics, which was just what Howard's harassing and desultory rear attacks were not calculated to permit. With their lofty hulls and huge ends the Spanish galleons offered the English gunners excellent targets, while in return a large proportion of the Spanish shot passed over the lower-built English ships.

It will be worth while to note particularly how badly situated were the Spaniards to cope with the method of attack adopted by Howard. The Armada was moving eastward, to leeward of the attack, and any ship desirous of closing must necessarily beat up against the wind. Any such movement, however, would assuredly take the ship out of the orderly array of the fleet and at the same

time make it difficult for friends to render assistance.

But when Howard bore down on the rear left Spanish squadron, Recalde, on the galleon "Santiago" (666 tons and 25 guns), was able to swing round for the two flagships to meet broadside to broadside, and the huge "Gran Grin" (1160 tons and 28 guns) followed suit. But the other ships in Recalde's squadron held on their way, thus leaving the "Santiago" and "Gran Grin" to face the "Ark Royal," "Revenge," "Victory," and "Triumph." These four English ships, commanded by our very foremost seamen, hammered the two Spaniards with merciless effect. The "Santiago" was in a particularly bad way, for not only were her sails and rigging badly damaged, but a couple of shots had struck her foremast, which was threatening to go overboard. Fortunately for Recalde, Medina Sidonia came to the rescue with the flagship "San Martin" (1000 tons and 48 guns), the "San Juan" (1050 tons and 50 guns), and "San Mateo" (750 tons and 34 guns), from the van, which led some other vessels also to come to Recalde's aid, among them the "Rosario" (1150 tons and 46 guns), "Santa Catalina" (730 tons and 23 guns), and the "San Salvador" (958 tons and 25 guns). If Howard had waited to give battle to the heavy ships that had come to the rescue, he would have ruined his whole plan of action, so he broke off the fight and bore to windward again.



THE ENGLISH SEIZED ANY CHANCE OF CUTTING OFF A STRAGGLER

Whether it was sheer misfortune or bad seamanship there is no telling, but Medina Sidonia's beating back to the rear was an expensive movement. The "Rosario" collided with the "Santa Catalina" and another ship, and all three were badly damaged, especially the first named, in command of Pedro de Valdes. And then to make matters still worse the two stern castle decks of the "San Salvador" blew up and strewed the ship with killed and wounded. She was Vice-Admiral de Orquendo's flagship, and one of the biggest in the Spanish fleet. The Spaniards extinguished the fire and got the pumps going and hoped to be able to keep her afloat. From one point of view she was a most important unit, seeing that she held the military exchequer of the expedition.

As the day wore on some of the English ships ran short of powder, and urgent demands were sent ashore for fresh supplies. Lord Howard was highly gratified, for his fleet had got into actual touch with the enemy and certainly was in no immediate danger of annihilation. But ashore there was the gravest anxiety, and Queen Bess and her Council were clamouring for news from Howard. The Lord High Admiral's account of the day's fighting was very brief. He intimated that he was too busily occupied for the writing of lengthy despatches, and concluded his letter: "For the love of God and our country let us have with all speed some great shot sent us of all bigness, and some powder, for this service will continue

The first day of the long expected battle was at an end, and the good people of Plymouth could sleep more soundly that night, for the Great Armada had passed and the town not a whit the worse.

The Lord High Admiral ordered Drake to lead the fleet during the night, his big stern lantern to be a guide to the other ships. Shortly after midnight the light in the "Revenge" suddenly disappeared. The "Ark Royal," "White Bear," and "Mary Rose" held on their way, but on the other vessels sail was shortened, or they were even hove to until dawn, in order to clear up the perplexing mystery attached to the disappearance of the "Revenge."

Drake's explanation next day was very simple, but whether strictly true, was more than doubtful. He declared that in the night he extinguished his light, while he turned off his course in order to follow several large ships, which were going down Channel. He found they were harmless merchantmen, and shortly afterwards he blundered upon the "Rosario," which, owing to the loss of her foremast, had been unable to keep up with the Spanish fleet. Drake summoned Don Pedro de Valdes to surrender, and refused to allow any parley as to terms, as he was pressed for time. Don Pedro, with some forty officers and gentlemen, went aboard the "Revenge," while Drake detailed the "Roebuck," an armed merchantman of 300 tons, to escort the prize to Torbay.

Drake's critics averred that the old buccaneering spirit had been

too strong for him, and he had endangered the fleet's pursuit of the Spaniards in order to snatch a rich prize for himself; but Drake maintained his version, and said that when he extinguished his own light, he thought the "Ark Royal's" poop lantern would be lighted up in token that she had resumed the leadership.

The result of Drake's action was seen with the coming of dawn,

when the "Ark Royal," "White Bear," and "Mary Rose" found themselves separated from the rest of the fleet, and too near the Armada to be comfortable in their isolated position. Medina Sidonia's interest, however, lay ahead, and he would not turn aside to give chase to vessels that were not hampering

his progress.

On Monday (22nd July) there was no actual fighting. Howard waited for the fleet to close up with him, and then contented himself with following the Spaniards up the Channel, waiting to seize any chance of cutting off a straggler. Before long the "San Salvador" was likely to founder, as a result of the explosion on the previous day, and various small craft attended on her to remove her men, and especially the treasure chest. In the middle of the salvage operations up came the "Victory," and Hawkins drove away the small vessels, and put a prize party aboard to



SIR FRANCIS DRAKE (From the Statue by Sir J. E. Boehm R.A.)

keep the pumps at work while the cripple was taken into Weymouth.

The greater part of Tuesday was occupied in an attack by the Spaniards upon Frobisher's squadron of 6 ships, which, during the night had got isolated near to Portland Bill. Frobisher, in the "Triumph," gallantly held his own against several galleons and four galleasses. These latter he robbed of much of their effectiveness by smashing their oars and oarsmen by excellent gunnery, and the galleasses under sail still got the worst of the exchanges with the biggest ship in the English fleet.

Meanwhile a change in the wind gave Medina Sidonia the

weather gauge, and he forthwith attempted to close upon the main body of the English fleet. The giant "Regazona" bore down upon the "Ark Royal," and other great Spanish ships each selected an antagonist. If the Spaniards could close and board, it would go hard with the English, owing to the great number of soldiers aboard any Spanish ship. Howard waited until the "Regazona" had almost run him aboard, when he tacked suddenly and stood out seaward. This cool example of fine seamanship was followed by Howard's captains again and again, so that the Spaniards had to relinquish all hope of bringing the pike and sword into play for which they longed.

This fight off Portland Bill ended with Frobisher and his companion ships safely restored to the fold; and the day was fittingly rounded off by the "Ark Royal" and the "San Martin" exchanging broadsides. Howard's ship was cut about a little up aloft, but the "San Martin," not only got hulled badly, some of the shot holes dangerously near the water-line, but there was considerable loss of

life on her gun-decks.

Since leaving Plymouth Howard had worked the English fleet as a single squadron. Starting with about 90 sail, he had been joined by other vessels as he chased the Spaniards up the Channel, and with five ships now sent to him by Sir George Carey, Governor of the Isle of Wight, the fleet numbered well over a hundred vessels. Consequently Howard decided to divide his force into four squadrons, directing one himself, and entrusting the others to Drake, Hawkins, and Frobisher. The day after the Portland fight was fine and the sea smooth, and beyond a few stray shots Howard made no fresh onslaught on the Spaniards. As the rival fleets proceeded easily towards the Isle of Wight, refitting and repairs were the order of the day, and vessels could be seen heeled over while well on the move, with the carpenters working in slings patching holes near the waterline.

At daylight on Thursday the Armada was within sight of what is now Ventnor in the Isle of Wight, and the English perceived that the "San Luis" (830 tons and 38 guns) had fallen astern during the night, and as the wind had died down, she could not make up

the lee-way, and join her becalmed main body.

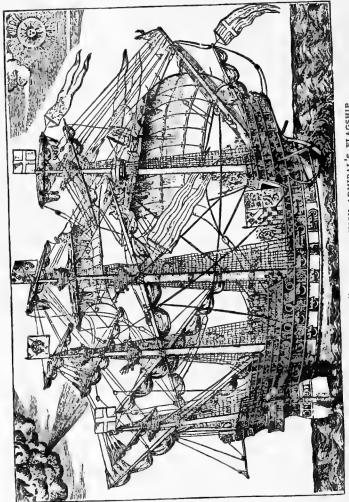
Hawkins, whose squadron was nearest to her, decided to capture this Spanish straggler and daringly lowered his row-boats in order that they might tow the "Victory" sufficiently close to take her. It was a risky manœuvre on the part of the old freebooter, for the absence of wind would be no bar to the long-oared galleasses coming to the rescue of their consort. The "Victory" was tugged by the boats so close to the "San Luis" that her musketeers and light guns forced the boatmen to cast off the tow-ropes and pull away from certain destruction, but leaving the "Victory" well placed to commence her task of splintering the big galleon.

Meantime Medina Sidonia had sent to the aid of the "San Luis" not only three galleasses, but the big "Rata Coronada" towed in their wake. In the calm Hawkins would be practically helpless against the on-coming quartette, and speedily the "Ark Royal" and "Golden Lion" were being towed to the assistance of the "Victory." Then commenced a lively mêlée for possession of the "San Luis," but in the end the Spaniards retained her.

Presently the wind freshened, and a number of ships on each side butted into action. The tactics of the English were a repetition of these employed in the Portland fight. Whenever opportunity offered or when it could be made, our ships sailed within easy range of the high floating castles, pouring in a broadside and speeding off to find another target. All the time Medina Sidonia was manœuvring to close with his irritating opponents, but the English ships foiled every attempt to get them to close quarters, and therefore, after several hours fighting, the Spanish commander once more renewed his way up Channel with not a few more masts, sails, rigging, and rudders calling for urgent repair.

More than once in the past the French had designed to invade England by way of the Isle of Wight, and it was quite probable that the Spaniards, too, would make the capture of the island the first point in their invasion. The inhabitants were fully assured of their danger and round about Carisbrooke Castle Sir George Carey had formed a great camp. It proved not to be wanted, thanks to the fight off the coast. It may be imagined with what anxiety Carey watched the engagement from the island cliffs. From his report we learn that "from five of the clock till ten (in the morning) there was so great expenditure of powder and bullet, that during this time the shot continued so thick together that it might rather have been judged a skirmish with small shot on land than a fight with great shot on sea."

Friday morning found the "Ark Royal" dressed in her flags as if for a gala day, instead of being in the midst of a desperately serious business. Commanders-in-chief on active service in those days, acting on behalf of the sovereign, were impowered to bestow rewards upon the spot for special service against the enemy. Howard was taking advantage of his prerogative to confer knighthoods on six of his officers, who had particularly distinguished themselves. Two of them, Lord Thomas Howard and Lord Sheffield, were already noblemen by birth, but those apparently lesser honours would be dearer prized because they testified to gallant bearing in the presence of the enemy. Hawkins and Frobisher, another couple singled out for the honour, one would think had earned the knightly accolade long before; the other new knights were George Beeston and Roger Townshend, who during this week in the Channel had more than satisfied even the high standard by which the Lord High Admiral judged his subordinates.



THE "ARK ROYAL," THE LORD HIGH ADMIRAL'S FLAGSHIP

It is interesting to note that George Beeston was ninety years old when he fought the "Dreadnought" against the Spaniards. In Bunbury Church, Cheshire, there is a monument to this old seadog, which states that he was laid to rest in 1601, at the age of 102 years.

Both fleets were now hampered by the lack of ammunition, but while the English could obtain supplies from ashore, Medina Sidonia could only rely on the Duke of Parma to meet his needs. The Spanish ships were loaded up with provisions and general stores for use after landing, rather than good supplies of ammunition with which to meet any great opposition at sea.

Some writers assert that Medina Sidonia was already depressed with a sense of failure. Others deny that this was the case, pointing out that the Spaniards had lost only two ships, and yet were in a fair way to co-operate with Parma at Dunkirk.

It is, however, quite certain that Medina Sidonia had less high hopes than when he had embarked at Lisbon, for we find him writing to Philip: "The enemy pursue me; they fire upon me most days, from morning till nightfall; but they will not close and grapple, and there is no remedy, for they are swift and we are slow." It must have been dawning upon Medina Sidonia that although he had set sail to protect Parma's army of invasion, the time was coming when he himself might require protection by Parma.

The Spanish fleet by this time had made the best of a favourable wind, and had anchored in Calais Roads on Saturday afternoon, 27th July. Ever since the commencement of the fight a week ago, additional ships had been coming to Howard's aid daily; they were small, but would prove useful; and now the English fleet of at least 140 sail lay anchored to seaward of the Spaniards scarcely

more than a cannon shot distant.

Medina Sidonia was left in peace on Sunday so far as Howard was concerned, and the whole Spanish fleet gave itself up to its customary devotions under the superintendence of the 180 priests who were aboard, which calls to mind the fact that twelve vessels of the Armada were named after the Apostles. But two items of news that reached the Spaniards did nothing to put them in a happier frame of mind. The friendly governor of Calais sent a message warning the Spanish admiral that he had selected an anchorage that was most dangerous owing to currents and crosscurrents; and later in the day news arrived that the Duke of Parma was not yet at Dunkirk, and in fact his flotilla was unable to leave the Flemish ports owing to blockading Dutchmen. Parma had to remain there "vainely perswading himself that he should be crowned King of England." Sidonia knew that Seymour's fleet had now joined Howard. He saw a signal hoisted on the "Ark Royal" calling the English admirals to a council of war. Dearly would he have loved to know the result of their deliberations—he would learn it only when it was too late.

In Dover Harbour there lay a number of fireships ready for use whenever there should be a call for them. Howard decided there was need for them that same night. As it was doubtful whether they could reach him in time, he decided to sacrifice eight of his small vessels, and prepared them with such haste that even their charged guns were not removed. One of them was the "Thomas Drake," of 200 tons, the property of Sir Francis, and which his brother Thomas had commanded in the last great raid on the West



THE FIRESHIPS CAME ON IN THEIR MAD CAREER AGAINST THE ENEMY'S CROWDED FLEET

Indies. The selected craft were stuffed with every kind of combustible and explosive. At midnight on the turn of the tide, the fireships, manned by small crews of volunteers who would trust to escaping in small boats, bore down on the enemy, bursting into red flames, and their guns exploding as they came on in their mad career against the enemy's crowded fleet.

The Great Armada was struck with a terrible panic, in which many of the ships cut their cables and sacrificed their anchors in order to bear eastward away from the blazing perils that threatened them with destruction. In the darkness, and with no settled plan for getting out to sea, the huddled galleons fouled each other, crashing their timbers and wrecking their spars. In the end not a single Spanish ship took fire, but their squadrons were scattered over the

sea in wild confusion, and when at last towards Gravelines and Dunkirk Medina Sidonia fired a gun as a signal for his fleet to anchor, only a few of his vessels could obey, for most of their anchors were lying at the bottom of the Calais Roads. Some fanciful writers have declared that for the idea of employing fireships Howard had to thank the inventive genius of Queen Elizabeth herself, whereas fireships were used in naval warfare nearly 400 years before the Queen was born. They were probably used for the first time by the Greeks in 1204, in the defence of Constantinople against the French and Venetians, and they were but a development of the Rhodian fire braziers of 1400 years earlier. Seventeen vessels filled with dry wood, pitch, etc., were floated down among the enemy. But the Venetians "leapt into their galleys and grappling the fire vessels with long hooks, they dragged them by force out of the port, and, towing them into the current, sent them burning down the strait." From that time onwards fireships became quite common. In 1585 the Dutch had not only floated fireships down the Scheldt against a wooden bridge which Parma had built across the river, but they included in the blazing procession a couple of "devil ships," loaded with gunpowder, one ship to explode by means of slow matches, and the other by a clockwork device in conjunction with a flint and steel. The latter method was successful, and 200 vards of Parma's bridge were swept away. In later years fireships became an established class in many navies, our own among them. They were very effective against masses of crowded shipping, and without actual contact the sparks alone would often at least fire sails or rigging. With the adoption of sailing in line, however, fireships lost their effectiveness, for vessels only had to open out for the blazing menace to pass through and burn itself out.

With the dawn on Monday the Great Armada was without formation, consisting of groups of ships here and there, with solitary sails between, endeavouring to rejoin their consorts. It was an opportunity that the English were not likely to let slip, and with the wind favourable they set to work in earnest. Almost at the commencement, however, Howard made a mistake, so far as his centre was concerned, for he turned aside to capture a big galleass, the "San Lorenzo," that was aground off Calais. If the remainder of the fleet had followed his example, Gravelines, "The Trafalgar of the Sixteenth Century," might have been different

reading.

It was probably the hour, however, for which Francis Drake had been born into this troubled world. The "Revenge" bore down on the "San Martin" and a group of galleons, and behind followed Hawkins and Frobisher leading their squadrons. With no powder to waste at long range, Drake waited until he was almost within pistol shot of the Spanish flagship, when he poured a broadside into the "San Martin" and dealt out a similar dose to each

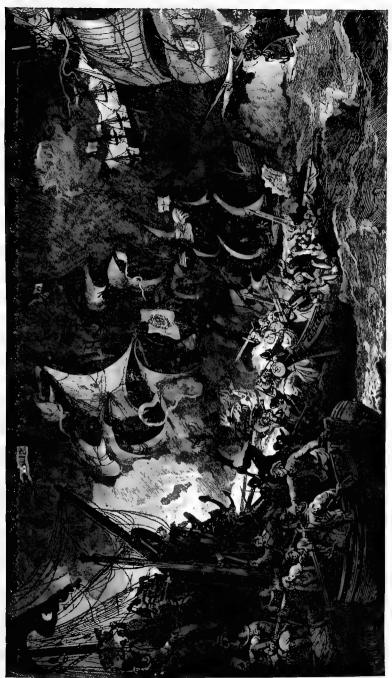
of her consorts, splintering their sides with a storm of iron. Leaving Hawkins and Frobisher to follow this excellent example, Drake next made for the main body of Spanish galleons, expecting Hawkins and Frobisher to follow him, but their squadrons remained behind to continue shattering the "San Martin" group, and thus the "Revenge" had a hot time, practically single-handed against some of the best ships and commanders in the whole Spanish fleet.

Not in vain had Francis Drake lived long, rough days on the wide seas; forgotten was his royal mistress' fickleness and the treachery of Court parasites. He was engaged in work after his own heart—and all for England. With both her broadsides in action, the "Revenge" at least delayed the big Spaniards, although she was "riddled with every kind of shot," and in return she converted many a Spanish deck into a blood-stained shambles. When three hours had elapsed Howard with his laggard ships re-entered the fray, and Dover way Seymour's guns were booming in token of a busy time on the left. The battle roared on. In some cases a single Spanish galleon was surrounded by a dozen English ships, pouring in broadsides at close range. The "San Felipe" (800 tons and 40 guns) was being thus pounded, when the "San Mateo" came to her aid, only to get into an equally bad plight. The "San Martin" and other ships came to their assistance, but the two galleons were so shot-riven that they drove ashore during the night, and the "San Martin" herself was leaking terribly from shotholes.

When the battle had lasted seven hours some of the Spanish magazines were quite empty, and for their defence had to depend solely upon musketry. It was only a violent squall coming on that saved some of the galleons from striking their colours; it would have been better for the crew of the "La Maria Juan" (665 tons and 24 guns) had she done so, for in the height of the storm she heeled over and went down, and of her 300 men less than a hundred were saved.

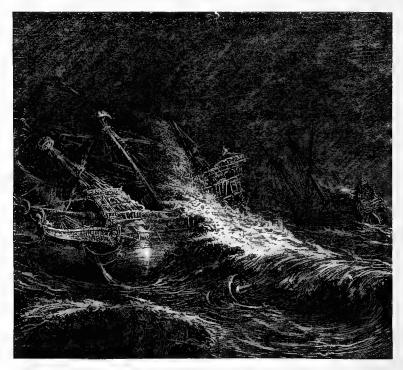
In the battle of Gravelines the Spaniards lost 600 men killed and 800 wounded. The actual loss in ships appeared trifling, but many of their craft had been so battered that they leaked like sieves But what they now dreaded, even after the storm had moderated, was their imminent danger of drifting on to the Zeeland shoals, while the English, under easy sail, were plagued by no such fears.

To cut a long story short Medina Sidonia took counsel with his commanders, and decided to sail northwards and return to fight when the weather was more favourable; and forthwith the Armada commenced to stagger up the North Sea, with the English seawolves hanging on their rear as far north as the Firth of Forth. Just a fortnight after the day when the Armada appeared off the Lizard, Howard left Medina Sidonia to his own devices, and the English prows turned homewards. But what destruction Howard



THE BATTLE ROARED ON UNTIL SOME OF THE SPANISH MAGAZINES WERE QUITE EMPTY

had been unable to complete, the winds of heaven and our rocky coasts accomplished only too well. Always poor sailors in stormy waters, many of the Spanish galleons were practically unmanageable owing to damages. The "Gran Grin" was wrecked on Fair Isle; off the Orkneys a great storm scattered the Spaniards, and four of them were driven into the Sound of Mull and lost. Along the coast of Ireland there was one long succession of disasters,



SHIPS OF THE ARMADA WRECKED ON THE IRISH COAST

of which only the chief may be noted. The "La Trinidad Valencera" (1100 tons), together with three galleons totalling 2000 tons, went to pieces off Malin Head, followed by three wrecks near Aran Island. Three galleons came to grief off Sligo, and off Mayo the big "Rata Coronada" and two others piled themselves ashore. The Galway coast robbed Medina Sidonia of three more ships, and the cliffs of Clare saw the loss of yet another trio. At the mouth of the Shannon gallant old Recalde lost two ships sunk and one burned —and so the pitiable tale of horror goes on. Even when the remnant of the once proud Armada had cleared the coast of Ireland, there was yet another storm awaiting it in the Bay of Biscay.

The "San Martin" reached Santander in the north of Spain on 21st September. The ship itself was in a wretched condition, fever and scurvy had robbed her of nearly 200 of her crew, and Medina Sidonia was an aged man with whitened hair. And what was true of the flagship could be said of all the other vessels that crawled back to Spain, as shown in the following extract from a letter written by Medina Sidonia to his disconsolate King: "The hardships and sufferings which have been endured cannot be described to your Majesty, for they have been greater than seen in any voyage before. On one ship arrived here her people passed fourteen days and not a drop of water to drink. In my flagship 180 persons have died of the sickness, and all the rest are ill, many of them of an infectious disease; and of the sixty in my personal service only two of them remain with me."

The losses of the Spaniards were 64 ships and 10,000 men at the lowest estimation, and little wonder that there was mourning throughout Spain, however much Philip attempted to minimise the disaster in accounts of the campaign, which he caused to be

circulated for the benefit of foreign countries.

Drake indignantly replied to some of these mendacious stories and thus placed upon record his impression of the truth of the matter:

"It was happily manifested in very deed to all nations how their navy, which they had termed invincible, consisting of one hundred and forty sail of ships, not only for their own kingdom, but strengthened with the greatest argosies, Portugal carracks, Florentines, and large hulks of other countries, were by thirty of Her Majesty's own ships of war, and a few of our own merchants, by the wise, valiant and advantageous conduct of the Lord Charles Howard, High Admiral of England, beaten and shuffled together even from the Lizard, in Cornwall, first to Portland, when they shamefully left Don Pedro de Valdes with his mighty ship: from Portland to Calais, where they lost Hugh de Moncado, with the galleys of which he was captain; and from Calais driven with squibs from their anchors, were chased out of the sight of England, round about Scotland and Ireland. Where for the sympathy of their religion hoping to find succour and assistance, a great part of them were crushed against the rocks, and those others that landed, being very many in number, were, notwithstanding, broken, slain, and taken; and so sent from village to village, coupled in halters, to be shipped into England, where Her Majesty, of her princely and invincible disposition, disdaining to put them to death, and scorning either to retain or entertain them, they were all sent back again to their countries, to witness and recount the worthy achievement of their invincible and dreadful navy . . . yet with all their great and terrible ostentation, they did not in all their sailing round about England, so much as sink or take one ship, bark, pinnace,

or cockboat, of ours, or even burn so much as one sheepcote on this

The English losses were triffing so far as killed and wounded were concerned. Although the officers and gentlemen volunteers wore brilliantly coloured clothes, on decks exposed to the fire of arquebusiers, not a single man of rank was killed in action, and very few are recorded as wounded. Among the rank and file the casualties at the hands of the Spaniards were remarkably few. But if shot and ball took little toll of our men, the same could not be said for the sickness that raged through our fleet. Life aboard ship even in times of peace led to frightful mortality from disease caused by the stench from the bilge, and having to exist on half-putrid victuals; add to these the evils incident to warfare—and the pestilence did the rest.

In St Paul's Cathedral was held a great Thanksgiving Service attended by Queen Elizabeth. In commemoration of our country being saved from its enemies a medal was struck, and round its edge was inscribed in Latin, Afflavit Deus et dissipantur-" God blew with His breath and they were scattered."

The pride of Spain was humbled to the dust, and forthwith her maritime power commenced to decline. On the other hand the victory was of enormous value to England. It bound her people, Protestant and Catholic, closer together; it elevated her among European states; and it pressed home the value to us of naval strength, although even nowadays it is sometimes difficult to get the exact necessity fully appreciated.

It was a remarkable fact that Queen Elizabeth did not think it incumbent upon her to signalise the deliverance of her kingdom from grievous peril by any distribution of royal favours, not the bestowal of a single reward among the naval commanders who had so greatly distinguished themselves. Except the half dozen honours conferred by the Lord High Admiral at the end of the first four days' fighting, the Queen did nothing beyond ordering the national thanksgiving and decorating the walls of St Paul's Cathedral

with trophies wrested from the Spaniards.

There was one Englishman who would have been in his element fighting against the Spaniards, but that he knew nothing of the great Armada until its half-shattered hulks had returned home. Thomas Cavendish, in a ship furnished at his own expense, had accompanied Sir Richard Grenville in 1585 to establish a colony in Virginia. On his return to England Cavendish invested his means in a small squadron of three vessels with which to commence business as a buccaneer, and accounted himself fortunate in securing a Queen's commission. On 21st July 1586, he set sail in his flagship, the "Desire," of 120 tons, for a voyage round the world. He first paid a visit to West Africa and burnt the town of Sierra Leone. He crossed over to South America and passed through the Straits of Magellan, thence to the Moluccas, Cape of Good Hope, and home, reaching England on 9th September 1588. In a letter to a patron this hardy navigator said: "I have either discovered or brought certain intelligence of all the rich places in the world, which were ever discovered by any Christian. I navigated along the coast of



CAVENDISH IN THE STRAITS OF MAGELLAN

Chili, Peru, and New Spain, where I made great spoils. I burned and sank nineteen ships, small and great. All the villages and towns that ever I landed at I burned and spoiled." Cavendish was only 28 years old when he accomplished the great feat, that had been achieved by only one Englishman before him.

With the defeat of the Great Armada, the work of Francis Drake as an empire-builder really came to an end. A year later he headed an expedition to Portugal, but the result added nothing

to his fame, although he returned with a great store of Spanish loot.

Thomas Fenner was killed off Lisbon in this expedition.

In 1591 occurred a naval incident that will be recounted as long as British tongues have speech and words have meaning. Lord Thomas Howard with half a dozen vessels lay off Flores, one of the Azores Islands, when 53 Spanish sail put in an appearance, being treasure galleons with an extraordinarily large escort. With such odds in their favour naturally the Spaniards decided to capture the English sail and carry them to Spain, which would be a pleasureable experience such as did not often come the Spaniards' way.

Lord Howard decided not to lay himself open to any such indignity, and at once took steps to recall to their ships a great part of the English crews who were ashore. A considerable number of them were invalids being nursed on land. Some time was occupied in getting the men off to their ships before the little English squadron could put out of the harbour. The last ship to leave was the "Revenge," Drake's old ship, then in command of Sir Richard Grenville, who would not hurry out and leave any of his sick to the tender mercy of the enemy. By the time Grenville stood out to sea, the whole Spanish fleet was between the "Revenge" and her comrade ships.

Even with 53 vessels to r against him the stout heart of Grenville never quailed, and doubtless he felt assured that Howard would come to his assistance. But Howard had not been brought up in the same desperate school as Grenville, and he decided to leave the "Revenge" to her fate, rather than risk his entire squadron.

When Grenville realised that he could look for no assistance from Howard, he headed the "Revenge" straight into the middle of the Spanish fleet, blazing away at the enemy, some of whom could not return his fire without striking their own ships. Gradually, however, the Spaniards manœuvred until several broadsides at a time could be directed upon the "Revenge." Grenville in return crippled several of his opponents, one after another, but when a Spanish ship was put out of action there was another ready to take her place. The fight continued even after darkness descended. The Spaniards attempted to board the stubborn craft only to be repulsed again and again. About midnight Grenville was severely wounded in the side by a round-shot splinter, and a little later he was struck again.

Morning light showed the "Revenge" in a pitiable plight. She was riddled with shot, her masts were gone, her decks ran with blood. Of the crew of a hundred men, half were dead, and the other half nearly all wounded; there remained scarcely a sound pike aboard, and the magazine contained but a single barrel of powder. Even then Grenville, though mortally wounded, refused to strike his colours, and desired to blow up his ship, rather than she should

fall into the hands of the enemy.

The Spanish losses by this time were four vessels sunk, others

badly damaged, and about 2000 men killed. The master of the "Revenge" persuaded the dying commander to propose terms to Don Alfonso Bazan, the Spanish admiral, and it was agreed that the ship should be surrendered, the survivors to be sent to England, the officers paying ransom and the seamen going free.



MORNING LIGHT SHOWED THE "REVENGE" IN A PITIABLE PLIGHT

With characteristic Spanish generosity after battle, Bazan fetched aboard his own ship the gallant Grenville, who was chivalrously received and his terrible wounds tended until he died three days later. The Spaniards put a crew aboard the "Revenge," but their prize never reached Spain, for she foundered off St Michael's shortly afterwards. Even in her end she struck a last blow at Spain, for the prize crew went down with her.

Little wonder that Sir Richard Grenville's desperate fight for

the honour of the flag should have stirred Tennyson's muse:

"And the sun went down, and the stars came out,
Far over the summer sea,
But never a moment ceased the fight
Of the one and the fifty three.
Ship after ship, the whole night long,
Their high-built galleons came,
Ship after ship, the whole night long,
With her battle, thunder and flame,
Ship after ship, the whole night long,
Drew back with her dead and shame.
For some were sunk, and many were shattered,
And so could fight no more.
God of battles! was ever a battle
Like this in the world before?"

In 1592 an expedition under Raleigh and Frobisher made a determined attack on Spanish commerce. Among other prizes they captured a galleon with a cargo valued at £150,000. The Queen appropriated almost the entire amount, because one small royal ship happened to be present. A year later Sir Walter and Sir John Burroughs, in another harassing venture, captured a Portuguese merchantman of 1600 tons, which was the largest ship ever seen in England. Her cargo of gold, spices, silks, pearls, drugs, ivory, and other valuable Oriental goods again drew the attention of English merchants to the value of the trade with the East. Several mercantile expeditions were sent to India; and as a result, on the last day of the year 1600 was formed the "Governor and Company of the merchants of London trading to the East Indies," better known in later days as the East India Company, which accomplished grand pioneer work in securing for us our Indian Empire.

If the counsel of Francis Drake had been taken after the defeat of the Great Armada, England would have made an organised attack by land and sea upon Spain. But the intriguing diplomatists blocked the way, and Elizabeth resumed negotiations with Philip. Drake, sick to death of politicians and all their ways, in 1595 once more betook himself with John Hawkins to the Spanish Main—never to return; and it may be remarked that Frobisher, in November of the previous year, had been killed by a musket-ball

in his side during a storming assault at Brest.

It was an ill-fated expedition. The leaders could not agree and without unison various of their plans went agley. Hawkins died in November, of a broken heart it is said consequent upon the loss of a small vessel to the Spaniards; but he was 75 years old, and ill-fitted to withstand an unhealthy climate. Nor did Drake long survive him, for he, too, fell a victim to the deadly climate of the Mosquito Gulf, being struck down by fever on the Island of Escudo de Veragua. On 28th January, 1596, off Porto Bello, his

gallant soul went to its account, very near to the spot where he

had witnessed his first sea-fight, and his first victory.

The body of the heroic "Little Pirate" was enclosed in a leaden coffin. A league from land Sir Thomas Baskerville committed the remains of his beloved leader to the deep to the sound of trumpet blast and cannon roar. On either side of him was sunk a ship, unseen monuments to mark the ocean grave of the hero of a hundred fights.

Early in 1596 it was rumoured that the Spaniards intended to attempt a fresh invasion of England; and for once Elizabeth decided to take time by the forelock. In June Lord Howard set sail with 17 royal ships, and more than 100 armed merchantmen, bound for Cadiz to destroy the hostile armament. The fleet carried 7000 soldiers under Lord Essex, who, though a brave officer, was too selfwilled to work smoothly under a superior. On 20th June the fleet arrived off Cadiz, where Howard not only destroyed all the vessels in the harbour, but demolished the forts and burnt a great part of the town. Essex on land, owing to lack of skill and the refusal to take advice, did not accomplish any important success. A year later Essex, who was Elizabeth's favourite, was given charge of a fleet of 120 ships for further operations against Spain, and especially to capture the Spanish West Indian fleet. He mismanaged the business entirely, and quarrelled with Sir Walter Raleigh, upon whose experience the incompetent leader more wisely would have relied. This was the last naval action of any note in the reign of Elizabeth, the strongest of the Tudor monarchs, who gave to us the beginnings of our world-wide commerce. When Queen Elizabeth died in 1603, she was succeeded by James VI of Scotland, a descendant of Margaret Tudor, sister of Henry VIII, who had married Tames IV of Scotland.

CHAPTER VIII

BLAKE AND THE DUTCH

THE accession of James I, our first monarch of the Stuart line, in 1603, territorially united Britain from Land's End to John o' Groats. The new king was an advocate for peace rather than war, and immediately after his accession he made friends with Spain and put an end to the raids and the buccaneering practices that

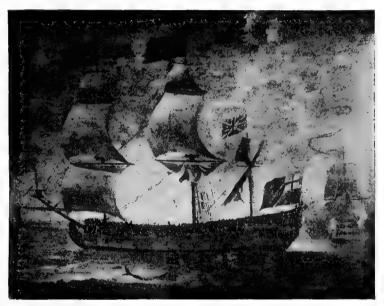
had been rife so long.

Scotland had a navy of its own, and when Henry VIII built our "Henry Grace à Dieu," in some respects it was not equal to the "Great Michael," built by James IV of Scotland, who was killed at Flodden in 1513. This vessel was 240 feet long, and her deck was 36 feet wide; her whole beam was greater than this by 20 feet, for her sides were 10 feet thick-wooden armour with a vengeance. Old records inform us that the "Great Michael" "bore many cannons, six on every side, with three great bassils, two behind in her dock, and one before, with 300 shot of small artillery." She carried 120 gunners and 1000 men-of-war, with 300 mariners to sail her; all told there were nearly 1500 officers and men aboard. We are not afforded any information concerning the doings of this great ship, but we do know that in 1532, for example, four Scottish war vessels captured fourteen English ships and a 300-ton Spaniard. This would be good business for the Scots, who drove notoriously hard bargains respecting the ransom of prisoners.

The new monarch evinced considerable interest in naval affairs, and especially in the construction of new vessels. Although our smaller ships in the recent war had proved swifter and more manageable than the huge galleons of Spain, it did not mean that they were not capable of immense improvement. New ships, while they increased in size, were greatly modified in shape, particularly noticeable in the disappearance of the high fore and stern castles, which allowed the introduction of three decks a little later. In the first year of his accession James I laid down three ships, and if he had only kept up that good beginning, by the end of his reign he would have left his successor a legacy of the finest navy afloat, whereas he allowed the Dutch to surpass him, although the latter

were only just commencing to build warships.

In 1608 was built at Woolwich the "Royal Prince." She was designed by Phineas Pett, whose family had been shipbuilders from the time of Henry VIII. This new ship was 114 feet long, 44 feet beam, and burden 1200 tons. She was double-built, and within and without was a marvel of adornments in the shape of carving, painting, and gilding, being "the greatest and goodliest ship that was ever built in England." She was pierced for 64 guns, but only carried 45, in order to obviate excessive top-hamper; when in action the vacant portholes could be filled with guns taken from the side



THE ROYAL PRINCE, 1608
(By permission of the Elder Brethren)

not firing. In this same year the "Ark Royal" was rebuilt, and her named changed to "Ann Royal." At the end of this reign the Royal Navy consisted of 32 ships, of which only four were first class and fifteen second class.

Practically the only naval event of importance in this reign of twenty-two years was an expedition against the Algerian pirates in 1618. It was undertaken chiefly to please Spain, but was unsuccessful. These pirates of Northern Africa were not only a terrible menace to shipping entering and leaving the Mediterranean, but their raids extended even to Ireland, and at Baltimore, a fishing village in County Cork, they committed frightful atrocities and carried off men, women, and children into slavery. Our own town of Poole suffered from a similar visitation.

The time was approaching when we should find ourselves at variance with the Dutch, whom the defeat of the Armada had assisted to free from the oppression of Spain. The Hollanders had a perfect genius for commerce, their ships sailed everywhere, and in particular they were building up an immense trade with the East Indies. An incident in the Channel showed that the Dutch had an increasingly good opinion of their own importance. Sir William Monson, who had served in the first warship fitted out by Queen Elizabeth, and was the last admiral she ever sent to sea, encountered a Dutch squadron, whose admiral would only dip his flag instead of lowering it. Monson plainly intimated that the flag must come down, or "the force of their ships would determine the question." The Dutch admiral, not desiring to precipitate a conflict, thereupon reluctantly lowered his flag, and went on his way, by no means pleased.

It was in this period that commenced the foundation of Greater Britain beyond the seas. Some settlements were effected by means of warships, others by mercantile vessels, and some by pure adventurers, and thus it may not be amiss to take a rather cursory view of what was accomplished without troubling to attribute

credit to one or the other method.

In 1605 we took possession of Barbadoes, although we did nothing towards colonising it for nearly a quarter of a century. A couple of years later the colonisation of Virginia commenced in real earnest, thanks chiefly to Captain John Smith, who had met with many adventures in Europe and Asia before he went out into the unknown West, and at last succeeded where Raleigh previously had failed. In the year 1607 Henry Hudson voyaged to Spitzbergen in search of the North-West Passage. In 1610 in the same quest he discovered Hudson Bay, but perished along with his young son, owing to his men breaking into mutiny and casting him adrift in a small boat. Some aristocratic adventurers, bound for Virginia, wrecked their vessel on a coral reef in the Bermuda Islands, of which they took possession.

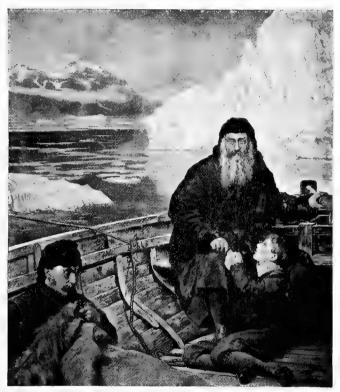
Sir Walter Raleigh had fallen on evil days, and for years was a prisoner under sentence of death in the Tower. James released him in 1616 in order that he might lead an expedition to discover a gold mine in Guiana. He was strictly forbidden to give offence to the Spaniards while he was in the New World. Unfortunately for Raleigh the gold mine proved to be a myth, and his followers were forced into a quarrel with the Spanish settlers. Upon his return to England he was charged with making war upon the King's "dear brother, the King of Spain," and eventually his old sentence under the charge of treason was revived, and he was executed on

October 29th 1618.

The "Mayflower" sailed from Plymouth on 6th September 1620, having on board a hundred men, women, and children, who sought

to escape religious persecution at home. The Pilgrim Fathers landed on the shores of Plymouth Bay in what is now Massachussets. Later, another thousand Puritans followed them, and after they had fought cold, famine, disease, and Indians, the settlement prospered and gave rise to the United States of to-day.

Charles I succeeded his father on March 27th, 1625, speedily



HUDSON'S LAST VOYAGE (From the Painting by the Hon. John Collier)

to enter into contentions with the Parliament, a state of affairs that was not calculated to spell progress in the Navy, especially as there was practically peace abroad and apparently no pressing need to spend money on ships. Before he had been king three months Parliament refused to find the money for a war with Spain, upon which Charles had set his heart. He decided to commence the war, and if he could secure a victory at the outset, Parliament would vote the necessary supplies. With the funds he could raise, the King

sent a great fleet and army under Sir Edward Cecil, to take Cadiz and capture a great Spanish treasure fleet that would be due from America. The fleet for the most part consisted of merchantmen whose sailors had no heart in the business. The soldiers were landed outside the town of Cadiz and got drunk in a body, and fortunately for them there was no Spanish force at hand to take advantage of their helplessness. Cecil failed to capture Cadiz, and while he was looking for the treasure fleet, it got safely into port. The whole expedition was an unmitigated failure.

Charles, having married Henrietta Maria of France, lent eight ships to his brother-in-law, Louis XIII, for use against Spain. When it was found that these vessels had been employed against



THE "SOVEREIGN OF THE SEAS"
(From the Model in the Royal Naval College Museum, Greenwich)

the Huguenots of Rochelle there was much irritation in this country, and when Charles took up the cause of the French Protestants, Louis XIII declared war against England. On 12th July, 1627, the Duke of Buckingham set sail with a fleet of a hundred ships, with a land force aboard, to relieve Rochelle. The English attempted to seize the island of Ré for use as their base, but a French army landed on the island and drove Buckingham back to his ships. This failure was worse than that of Cadiz, for of the 7000 of our troops employed, quite one-half perished from hunger and sickness. The Earl of Lindsey took out a fleet a year later, but again no success awaited our arms, owing to the half-heartedness of the sailors and the incompetence of their commanders. Our Navy at this time had gone literally to the dogs. Want of money meant ships rotting for lack of attention, shortness of victuals and wages in arrear; many of the officers were land-lubbers, good soldiers maybe, but unable to inspire the tars. It was scarcely credible that the Tudor

legacy to the Stuarts of the finest Navy in Europe could have so degenerated in less than half a century. It was enough to make

some of the old Elizabethan sea-dogs walk in their graves.

There is every reason to believe that Charles would have gloried in a first-class Navy, if the Parliament would have bent to his autocratic rule and furnished the means out of the country's revenue. Hitherto it had been the custom of Parliament upon the accession of a new sovereign to vote to him or her for life a grant of "Tunnage and Poundage," which were taxes levied on every tun of beer or wine and every pound of merchandise imported into the country. But in the case of Charles I the Parliament insisted upon

voting the grant only for a year at a time, and the King refused the money altogether. Afterwards when he required money Charles raised it by means of forced loans, and collected "Tunnage and Poundage" without the consent of Parliament.

Charles I was able to read the signs of the times abroad better than at home. He perceived Holland's commercial progress and her growing Navy, and at the same time marked naval activity in France. It behoved England to prepare to meet the challenge that would eventually come from one, or possibly



THE "SOVEREIGN OF THE SEAS"

from both, of these countries. The King decided to build ships in preparation for the danger; but without money, and plenty of it, ships are an impossibility, as the British taxpayer of to-day can vouch.

In five years Charles dissolved Parliament three times, and then decided to govern without it, and to provide money for the Navy he levied "Ship Money," which was really a revival of the "shipgeld" of Anglo-Saxon times. This taxation without the consent of Parliament was a violation of one of the great principles of Magna Charta, and created great irritation throughout the country, but it only concerns us that Charles got the money and built a number of 50-ton armed pinnaces; and he made many journeys to Deptford and Woolwich to inspect their building and launching. Rigged with three masts and square sails, and equipped with oars and possessing a couple of decks and a round house, these "whelps," as they were styled, were fast and useful little duplicates of their bigger sisters.

But the pride of the fleet was the "Sovereign of the Seas,"

which was launched in 1637. She was another product of the Pett family, and elicited the admiration of even Dutch and French critics. She was 170 feet long; beam, 48 feet; depth, 19 feet; and burden, 1637 tons. It was accounted a most happy augury that the tonnage coincided with the year of our Lord. She was our first three-decker, and carried four masts. She had three tiers of ordnance, half of the pieces being cannon and demi-cannon, culverins and demi-culverins. All told, she had about 120 guns. For a period of about half a century the "Sovereign" took part in nearly all the great engagements we had with the French and Dutch, and finally was burnt at Chatham on 27th January 1696.

Another notable addition to our Navy was the "Constance Warwick," modelled by Pett upon a French vessel which he had seen in the Thames. Her dimensions were: -keel, 85 feet long; beam, 26 feet; depth, 13 feet; and burden, 315 tons. She mounted 32 guns, and her crew numbered 140. Her distinguishing feature was her sharpness of shape, which gave her unusual speed. This vessel was our first frigate, and the forerunner of our present cruisers. It was said that her speed enabled her to capture from privateers sufficient money to have laden her. What Peter Pett thought of the new type was shown by his desire to have it recorded on his tomb, that he was the inventor of the frigate.

In 1642 civil war broke out between the King and Parliament, and after seven years' internal strife that did not concern the Navy, Charles laid his head on the block at Whitehall in terrible negation of his claim to the Divine right of kings. During the Civil War the military forces were divided, but now that Parliament decided to govern the country without a king, the Royal Navy, with the exception of one ship, threw in its lot with Oliver Cromwell. Charles II and his Cavaliers could not withstand the onslaught of the army of the Parliament, and the young King was hunted

out of the country with a price upon his head.

Cromwell was never in doubt about the necessity of a strong Navy, which was at once put under the administration of a committee appointed by both Houses of Parliament, which gave three Commissioners seats on the Admiralty Board, with powers to put the Navy on a strong footing. These three "Generals of the Sea," as they were termed, were General Blake, Colonel Deane, and Colonel Popham, the first-named being appointed chief; and it should be noted that these three men were military officers and not sailors.

This torceful trio speedily made their mark in matters naval. The dockyards were reorganised, the seamen in future were to be paid regularly, and the victualling arrangements were to be improved. In the past the men had been called to fight upon half-empty stomachs, and their wages in arrears, two items alone in themselves sufficient to play havoc with the stoutest patriotism. The pay for

an A.B. was 24s. a month, and for an ordinary seaman 19s., due at the end of commission. Three squadrons were fitted out, and Blake himself, at the head of one of them, set out to check the depredations of Prince Rupert, cousin of the exiled King, whose squadron was capturing merchantmen wherever they were found.

Notwithstanding that Robert Blake was fifty-two years of age, was a soldier, and strode his deck dressed in full military uniform,



ADMIRAL BLAKE
(From the Painting in Greenwich Hospital)

even to his top-boots, he was a born admiral. Very quickly he had got Rupert locked up in Kinsale Harbour, but the Royalists gave him the slip. The Roundhead admiral chased them to Lisbon, but Rupert would not give fight, and remained sheltered by the guns of the Portuguese. Blake informed the King of Portugal, that unless he refused further shelter to Rupert, he would attack the Brazilian fleet, which was on its way to Lisbon laden with sugar and other valuable cargo.

As the Portuguese paid no heed to the warning Blake proceeded

to immediate action, and within five miles of Lisbon harbour he fell on the Brazilian fleet, sinking one vessel and capturing a dozen others. King John of Portugal at once perceived that nursing the English Royalists was an expensive hobby, and he persuaded Rupert to sneak out of the harbour and make for the Mediterranean.

Blake shortly returned to England and found employment in reducing the Channel Islands, that espoused the cause of Charles. Again it became necessary to deal with Prince Rupert, once and for all, for he was now capturing merchantmen regardless of nationality, which was likely to embroil England with foreign nations. After a game of hide-and-seek, Blake chased the Royalist squadron into the Mediterranean, being the first English admiral to pass through the Strait of Gibraltar since Richard Cœur de Lion, went to the Crusades. Rupert's ships having been dispersed by a gale, a portion of them put into Cartagena harbour. The Spanish governor refused to turn them out, whereupon Blake smashed up every vessel but one, which he retained as a prize. But Rupert still defied capture, and, after being dodged from port to port, made his way to the West Indies, and remained there until after the Restoration,

when he rendered more legitimate service to his country.

Various European nations soon perceived that in Blake England had found a commander, whose blunt directness of purpose in the honour and interest of his country refused to be bamboozled by any diplomatic wiles, as Spain and Portugal had learnt when they allowed Prince Rupert to shelter on their shores. Blake's code of honour was exemplified by an incident in the Channel at a time when there was a temporary misunderstanding with France. The English admiral fell in with a French frigate, whose captain was requested to come aboard Blake's ship. The Frenchman duly presented himself, only to find his sword demanded. The officer, unaware of any hostilities between the two countries, indignantly refused to accede on the ground that he had been tricked into his unenviable position. Blake agreed that his action perhaps sayoured of sharp practice, and allowed the French officer to return to his ship, in order that the question should be fought out. After two hours' hard fighting the Frenchman was once more on Blake's ship, handing over his sword, quite satisfied that he had vindicated his honour.

Meanwhile Dutch commerce had been growing enormously, and their Navy viewed itself as second to none on the high seas. The Dutch traders had driven the English out of the Spice Islands in the East Indies, and nearly thirty years earlier had massacred some of our traders at Amboyna (Molucca Island), an atrocity that still rankled in English minds. Our fishermen in particular had an intense hatred for the Dutch, who sailed their fishing fleets into English waters, guarded by armed vessels, and filled their boats with fish without paying a halfpenny in lawful taxes. With

a view to increasing our own trade abroad, the Commonwealth in 1651 passed the Navigation Act, which declared that no merchandise could enter our ports except in English ships, or those belonging to the countries from whence the goods came. This was a distinct blow to the Dutch carrying trade, and caused intense irritation in Holland; and to make matters worse the English still insisted on Dutch vessels saluting our flag, and searched their merchantmen suspected of carrying the goods of our avowed enemies.

In such circumstances there was little wonder that Dutch patience frayed to breaking point. It was the action of Commodore Young, in command of an English squadron, that brought the two countries to grips. Young, meeting a Dutch convoy from Genoa, demanded the customary salute, and upon the Dutch admiral refusing, he did not hesitate to fire a broadside into the hostile flagship, and in the course of the desperate action that ensued, the

Dutch were completely routed.

Tremendous excitement ensued in Holland. Explanations were demanded from the English, while a Dutch fleet was fitting out under Van Tromp. This renowned admiral had spent all his life at sea. When a cabin boy, he was captured and made to serve on an English ship, which bred in him a positive hatred of the English. Gradually his nautical genius raised him to a high position in his country's navy, and particularly had he distinguished himself against Spain.

While the diplomatists of England and Holland discussed peace with their tongues in their cheeks, in May 1652 Tromp suddenly appeared in the Downs, where Blake came up with him the next day with 15 ships. The English admiral promptly demanded the usual salute, and fired a couple of blank shots to remind the Dutchman of his forgetfulness. Tromp ignored the reminder, and therefore Blake fired a third warning shot. The Dutch declared that it struck one of their ships and killed a sailor. Whether this was a fact or not was not very material, for Tromp was spoiling for trouble, and his flagship, the "Blederode" guns) emptied a broadside into the stern of the "James" guns), where Blake was in his cabin. The crash drew from him the remark that it was "not very civil of Tromp to break my windows." A second broadside followed the first, and the English admiral knew that the great struggle for supremacy on the sea had really commenced.

It will be well to view the combatants. Tromp had been reared to the sea, and he led 42 well-found ships under commanders of wide experience. On the other hand Blake did not commence his career in the Navy until he was of an age when many admirals would be looking forward to leaving it, and he had less than half the number of the hostile ships. Of his two chief colleagues, Admirals Penn and Bourne, only the former was a sailor by profession, and he was absent on leave, while Bourne's ships had been detached previously,

and at the time Blake did not know whether they were far or near,

although he fervently hoped it was the latter.

The battle commenced at four o'clock in the afternoon, and as both fleets were desperately anxious to take each other's measure, there was little or no attempt at tactics. So impetuous was Blake that the "James," with her 50 guns, outsailed her companions, and found herself practically single-handed against the whole Dutch fleet, whose guns were trained on her with terrible effect. Seventy cannon-balls battered her hull, her masts were shattered, her sails in shreds, and her rigging cut through. Fifty dead or dying men strewed her deck, but still the guns of the "James" answered the foe, until her consorts came up and claimed Tromp's attention.

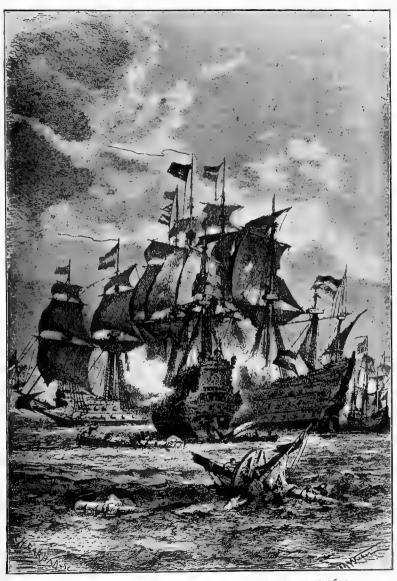
For five hours the conflict raged, and then arrived upon the scene Bourne's eight ships, promptly to cut off a couple of Dutchmen. Far outnumbered, as he was, in all probability Blake would have been worsted, but for Bourne's timely intervention, which caused Tromp to retire at nine o'clock with the loss of two ships, while the English fleet was intact, save for a fearful battering. All through the night Blake was repairing damages ready to recommence the fray on the morrow, but the Dutchmen were already making all sail for the Flemish coast. For the first time in his life Tromp had

met his equal, and found it not an enjoyable experience.

As might be expected this unofficial battle put an end to the negotiations of the peace diplomats. War was proclaimed, and both countries entered into preparations with the utmost ardour. In England it was decided to increase the fleet by 40 ships, chiefly armed merchantmen. Finding suitable crews to man them was not easy, and consequently a couple of regiments were put afloat, and thus was set the fashion of "marines" forming part of the crew of a warship. The Dutch were building 60 improved vessels, and with armed merchantmen proposed to place on the sea a fleet of at least 100 sail.

While these preparations were in progress Blake was exceedingly busy capturing Dutch merchantmen that came up the Channel, blissfully ignorant that war had broken out, and not a few richly-laden vessels found their way into the Thames instead of their own Dutch ports. Incidentally many of these ships were fitted out immediately to fight against the country that had built them, and as Blake, in one month, sent into the Thames forty prizes, there were plenty from which to make a choice.

Going north, Blake purposed to give a lesson to the Dutch fishermen who still fished in our waters notwithstanding repeated warnings. He intercepted a great fleet of herring boats that was being convoyed home by a dozen warships. The English squadron captured nine of the latter, a capital haul for addition to our own fleet. The cargoes of herrings were thrown overboard, but the fishing boats were spared, as most of them were the property of poor



ACTION BETWEEN ENGLISH AND DUTCH FLEETS, MAY 1652

men. For this severe blow to their profitable fishing industry the Dutch Government roundly blamed Tromp, and for not preventing the disaster he was deposed from the supreme command of the

Dutch Navy.

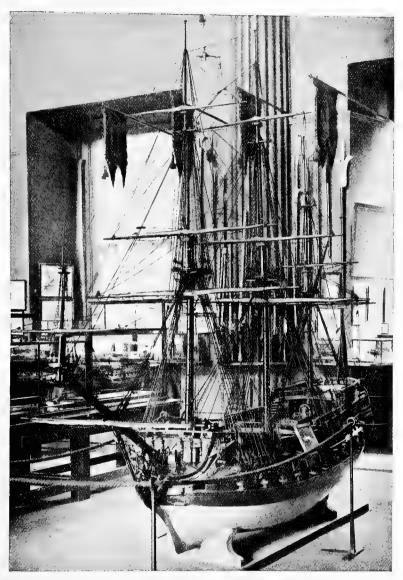
In the meantime Blake had left a squadron to look after the Channel under Sir George Ayscue, an experienced commander, who had been employed to reduce Barbadoes. He soon encountered a Dutch squadron under Admiral Re Ruyter. The Dutchmen were superior in numbers, and after a hot engagement neither side could claim a victory. The Parliament relieved Ayscue of his command, not considering that "he had been as victorious as he might have been." Whether in this instance the censure were deserved, or not, it was a very plain intimation to English admirals that failure to achieve success would be viewed with the most frosty disapproval by the Admiralty Board.

By September 1652 Holland considered herself prepared to test the strength of England with a fleet of 57 sail under De Witt, formerly Tromp's second in command, while De Ruyter served under him. The English fleet under Blake numbered 68 sail when the hostile forces met in the Downs. Under their skilful admirals the Dutch secured an advantageous position close to the Goodwin Sands, their more flat-bottomed ships being better able to navigate

shallow waters than the English.

Blake in the "Resolution," taking all risks, at four o'clock in the afternoon sailed his ships between the Sands and the Dutchmen, upon whom they opened a hot fire in passing. Two of the English ships went aground, but fortunately a wind blew them off the Sands again before they had suffered any damage. When Blake closed in, the fire was very hot at close quarters, and the excellence of the English gunnery with a superior weight of metal took effect on the Dutch. Two of their ships were sunk and two taken, and not a few were mere shattered hulks by the time darkness came on. Owing to jealousy of De Witt on the part of those who resented Tromp's deposition, some of the Dutch ships slipped away during the night. When De Witt saw this, he was forced to follow suit and retire to his own coast; and many of Blake's ships had suffered such damage to their spars and rigging that no attempt was made to set out in chase.

In England this victory created immense enthusiasm, for it was the first important naval fight since the days of Queen Elizabeth. Blake had now been measured against Holland's trio of great admirals, than whom no fighting seamen had more experience, yet the colonel ashore, who at a bound became admiral at sea, with only three years' naval experience behind him, had more than held his own with them. It appeared that the list of the world's famous admirals was in need of revision, with the name of "General-at-Sea" Blake somewhere near the top.



LINE OF BATTLESHIP, 1650 (From a Model in the Museum of the Royal United Service Institution)

The English authorities concluded that this decisive defeat would satisfy the Dutch for the year, for no country's ships yet kept the sea in any numbers to risk damage from the winter gales. Some of our armed merchantmen were put out of service, and the depleted fleet was divided into several detachments. This mistake shortly was to be driven home to us in a particularly drastic manner.

In November the Dutch were anxious for over 400 outward-bound merchantmen to get to sea, having been held up during the late naval operations, and to ensure them passing through the Straits of Dover, Tromp, who had been restored to favour, put to sea with nearly 100 ships. Thus it was that on 30th November, with only 42 sail, Blake found himself off Dungeness opposed by his old friend Tromp, burning to wipe out old scores, and with a mighty fleet to back up his desire. Blake was in no very enviable position. If he sailed away from the danger, he would leave our shores at the mercy of Tromp. No matter what the odds, there was

nothing to do but fight.

The engagement commenced at three o'clock in the afternoon, Tromp, in the "Blederode," without delay attempting to grapple with the "Triumph," on which was Blake. Missing the English flagship, the "Blederode" charged into our "Garland" of 48 guns, which was speedily in trouble, until the "Bonaventure" (30 guns) came up to her aid and turned the scale against Tromp, to whose assistance in turn came Evertz, a very able Dutch commander in the "Zealandia" (72 guns). The fight between these four ships was of a most determined character, although it was an unequal match for the English couple, and not until they had each lost about sixty men killed did the Dutch board and capture them. Three other English ships, the "Triumph," "Vanguard," and "Victory" (50 guns), fought desperately against a score of Dutchmen, and finally held their own, although they suffered severe damages. Three times did the Dutch board the "Triumph," and each time Blake's crew drove them back with great slaughter. The condition of the "Triumph" showed that she had endured a perfect whirlwind of shot, in token of Tromp's fierce desire to capture Blake. She had been hulled by hundreds of balls, the fore-topmast was shot away, the mainstay was gone, and the rigging much torn. And only just in the nick of time up came the "Vanguard" and other ships to ensure that their flagship did not fall into the hands of the enemy.

When at length darkness came on, Blake with the loss of six ships withdrew to the Thames to repair damages and obtain reinforcements. While the Dutch could claim the advantage in the fight, it was a dearly-won victory, for their loss of men was very great; and although they only lost one of their ships, blown up, the remainder were too battered to follow up their advantage. Nevertheless Tromp had better news to send home, and he vain-



BATTLE BETWEEN THE ENGLISH AND DUTCH OFF DUNGENESS, 30TH NOVEMBER 1652

gloriously affixed a broom on his topmast to signify that the Dutch would sweep the English from the seas.

Considering the odds against him, Blake had every reason to be rather satisfied with the result, but he was of opinion that he would have done infinitely better if some of his captains had put more vim into their work and showed more alacrity in engaging. These were chiefly the masters of certain armed merchantmen, who retained their commands when their vessels were hired for naval purposes, and Blake suspected them of being secret Royalists, whose hearts were not in the immediate business. As the result of an inquiry several officers were dismissed the service. Blake took his defeat to heart so much that he asked to be relieved, but the Navy could not spare him, and the Parliament increased his powers, and made a genuine attempt to provide him with efficient vessels.

In February of the next year (1653) Blake took to sea nearly fifty ships, with him Vice-Admiral Penn, second in command, and Lawson, acting as rear-admiral. General Monk was with Blake, but only commanding a body of troops. On the morning of the 18th Tromp was sighted off Portland with 75 men-of-war, shepherding a fleet of 200 merchantmen up the Channel. If Tromp, with whom were De Ruyter and Evertz, had cared to take advantage of the weather, he could have escaped with his charges; but the great Dutchman elected to fight, sending the merchantmen to windward,

while he bore down on the English with his warships.

Blake, in the "Triumph," had divided his fleet into three squadrons, himself commanding one, while Penn, in the "Speaker," headed the second, and Lawson, in the "Fairfax," led the third squadron. Blake's division bore the brunt of the Dutch attack, and as usual the flagship was in the thickest of the fray. Blake was wounded in the thigh for life; his captain was shot at his feet; more than a hundred men were killed, and few of the remainder escaped unwounded. The cannonading at close quarters was tremendous, and the sea was strewn with wreckage. De Ruyter made a desperate onslaught on the "Prosperous," and eventually captured her, when the "Triumph" came in and rescued her, and Blake almost secured De Ruyter himself. At the end of the day the English fleet had lost two ships and three disabled; the "Sampson" was so shattered that it was unsafe for her crew to remain aboard. Tromp lost nine ships. Really the Dutch ships were not in the best of condition for fighting, for Tromp had not been home since his defeat of Blake in the previous November.

During the night the rival fleets kept in touch with each other, and at daylight were south of the Isle of Wight; and in a running fight Blake captured five men-of-war and sixteen merchantmen, that Tromp had ordered to make for Dunkirk. The Dutch admiral was fighting now not for victory, but to save further loss of his convoy. Towards evening the fleets were only some four leagues from Calais, and the Dutch ships stood in for that anchorage.

As if the bull-dog tenacity of Blake was not sufficient to occupy Tromp's attention, the Dutchman was experiencing trouble with some of his own captains, who desired to sail for home on the plea that they were short of ammunition, whereas the real reason lay in various animosities bred by the rivalry of Tromp and De Witt. During the night Tromp packed off the unruly ones, lest the dis-

satisfaction should spread to others in his fleet.

Morning light showed Blake that Tromp's numbers had diminished, and he jumped to the natural conclusion that the missing vessels had been sent on to convoy the traders out of danger, while Tromp would fight to cover their retreat. Detaching a few good ships to counteract this move, Blake bore down on Tromp. The rest of the day was occupied in a running fight until the remnant of the Dutch fleet made for the French shore and anchored apparently for the night. Only apparently, for under cover of darkness Tromp got away, and morning light showed Blake not a sail in sight. Meanwhile Blake's detached ships had fallen in with the unguarded merchantmen, who scattered like sheep, fouling each other and rendering a good number easy to capture. All told, Blake had secured 17 men-of-war in addition to about fifty merchantmen, another very useful addition to our fleet and mercantile navy, but they had cost us the lives of many officers and men.

Whatever Van Tromp might think of his famous broom, Blake certainly had stripped it of its bristles. In England a day of general thanksgiving was appointed; the commanders received public thanks; and the State arranged provision for the widows and

orphans of the men who had been killed in action.

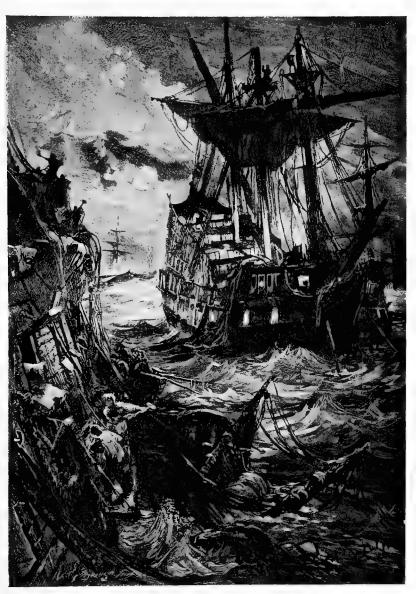
In April, only a couple of months later, Blake was despatched to the north to intercept a convoy of Dutch merchantmen, many of whom were taking to return home via the north of Scotland, rather than brave the dangers of the Straits of Dover. Some Dutch ships now landed their cargoes at French ports for conveyance to Holland overland. It was in this month that Cromwell expelled the Long Parliament, clearing the House of Commons with thirty of his old troopers. It is not improbable that Cromwell sent Blake north out of the way, lest so strong a man should object to this arbitrary treatment of the Parliament. As a matter of fact Blake was afterwards asked to express his opinion on the matter, and gave his famous blunt reply: "It is not for us to mind the affairs of State, but to keep foreigners from fooling us." If the question were inspired by the idea that the Navy might feel disposed to oppose Cromwell's rough measures with the Parliament, the answer dissipated any such hope.

Tromp, having escorted home in safety the merchantmen from off the north of Scotland without any awkward encounter with Blake, judged that the coast was clear, his warm adversary still being in the north. With a fleet of 98 sail, his admirals being De Witt, Ruyter, and Evertz, Tromp crossed over to the Downs and treated Dover to a couple of hours' smart cannonading. But off Yarmouth lay an English fleet of 105 sail, which was divided into three squadrons, one under Deane and Monk, the second under Penn, and the third under Lawson. On 2nd June the two fleets met off the Gabbard Shoals, east of Harwich. Lawson led the van, and with his squadron under press of sail, he broke the enemy's line and separated De Ruyter's squadron from the main body. This naval manœuvre of Lawson's put De Ruyter in grievous peril, and two of his ships had been sunk before Tromp could come to the rescue. In this battle the Dutch used chain-shot (two balls connected by a chain) for the first time, and it afterwards was generally adopted because of the havor it worked with the rigging. Almost the first of these missiles deprived us of the gallant General Deane, who was literally cut in two, Monk reverently covering the body of his dead friend with the cloak he took from his own shoulders. The Dutch lost Admiral Van Kelson, who was blown up in his ship in the middle of the action, which continued without flagging until darkness put an end to the day's bloodshed.

During the night both sides were busy repairing damages in readiness to resume the fight on the morrow. Owing to a calm the engagement did not open until noon, and for a time neither side gained any particular advantage. The English were a little disheartened at the loss of a favourite leader, and above all they missed that master spirit, for whose advent from somewhere in

the north they anxiously awaited.

Suddenly the English seamen were galvanised into fresh life by the sound of guns in the Dutch rear, and presently the "Triumph," Blake's flagship, came blazing through the enemy's line, leading a squadron of 18 fresh ships. The mere presence of Blake acted like a tonic, and infected the English attack with a sting that had been lacking. Tromp did all that a gallant commander could do to avert disaster. Particularly did he endeavour to capture the "James," Penn's flagship, which would have heartened the Dutch considerably. Once the "James" was boarded, but the Dutch were repulsed, and Penn returned the compliment by gaining possession of the "Blederode's" quarter-deck. He would have captured the whole ship had not Tromp blown up the upper deck and the English boarders with it. Whether the explosion was accidental or of set purpose, it had a great bearing on the fortunes of the Dutch. Tromp contrived to escape injury, and, getting aboard a frigate, he hoisted his flag to intimate to his men that he still led them; but it was too late, for several of his



DURING THE NIGHT BOTH SIDES WERE BUSY REPAIRING DAMAGES,

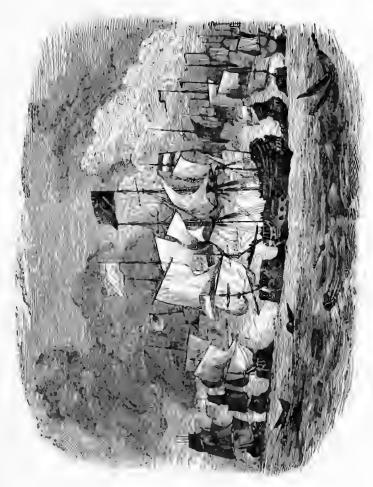
captains were already in full flight, and the retreat became general, with the English hanging on to them, sinking some vessels and capturing others. It was only darkness that prevented the whole

Dutch fleet from being destroyed or captured.

The victory of the English was most unqualified. We captured II men-of-war, while 6 were sunk, 2 blew up and burnt; the prisoners numbered 1360, and among them were three admirals and six captains. Our fleet did not lose a single ship, but there was much damage to spars, rigging, and sails; our total losses were 126 men killed and 236 wounded. Holland was staggered at this crushing defeat; the Government was in bad odour; and there were loud outcries for the punishment of the naval commanders for incapacity, if not for treason. Tromp and De Ruyter refused to go to sea again unless with better ships, while De Witt frankly explained to the States Assembly that the English were "the masters of both the Dutch and the seas."

Blake repaired his damages, sent his wounded ashore, and proceeded to follow up his victory by blockading the Dutch coast, thus working enormous damage to their trade, as well as making it impossible for the fishing fleet to engage in its profitable summer voyage. Blake, being forced to return to England owing to trouble with an old wound and a bout of fever, the command was taken by Monk, with whom were Penn and Lawson. Tromp was fitting out 83 men-of-war and 25 armed merchantmen in the Maas, and De Witt was by the Texel with 25 ships. Monk with 106 ships desired to prevent the two Dutch admirals joining forces. Tromp succeeded in getting out to sea, and then tempted Monk away from the Texel, while De Witt's squadron also got into open water. instance at least the great military-admiral was out-generalled by the seamen. Tromp and De Witt having effected a junction, Monk found himself faced by a numerically stronger force, but he had 4000 guns, many of them heavier than those of the Dutch; and metal would tell in the fight.

In this battle off the Texel both fleets fought in line in regular order of battle, and the engagement was marked by the utmost hatred and ferocity. Quite early two of our ships, the "Oak" and the "Worcester," were set on fire by a fireship; and Blake's old ship, the "Triumph," was also in flames, which her crew extinguished with difficulty. Just when Tromp was about to engage with Monk's flagship, the great Dutch admiral fell on his quarter-deck pierced through the heart. This loss filled the Dutch seamen with dismay, and in rapid succession their ships "hauled their wind" and fled, pursued by the English. On Monk's instructions no quarter was given, coinciding with his military vigour on land, bearing in mind that he had played a leading part in the massacre of the Scots at the Battle of Dunbar (1650). The following extract from the account of a French eye-witness shows how fierce was this wind-up



DEFEAT OF THE DUTCH FLEET OFF THE TEXEL, 31ST JULY 1653

to the long struggle between the two countries:—" The smoke dispersing, the two fleets were seen in a condition which showed the horrible fury of the conflict. The whole sea was covered with dead bodies, with fragments, and with hulls of ships, still smoking or burning. Throughout the remainder of the two fleets were seen only dismasted vessels and sails perforated throughout by cannon balls."

Our losses were 3 ships sunk or burnt; 500 men killed, including 7 captains, and 800 wounded, including 5 captains. But the Dutch casualties were enormous: 26 men-of-war were destroyed by shot and fire, and none being recorded as captured speaks volumes for the relentless character of the fight; 1200 men were killed, including many officers of distinction, 1500 were

drowned, 2500 wounded, and 1000 were taken prisoner.

This last shattering blow (31st July 1653) broke the naval power of Holland. During the twenty-three months of the war, the Dutch acknowledged the loss of 1100 men-of-war and merchantmen, valued at six millions sterling, and much more in the money of our day; but in reality 1700 ships more nearly represented their losses. In the peace that was concluded in April 1654, one of the terms to which the Dutch agreed was the claim of the English to a salute when in the home seas.

Success against Holland whetted the appetite of Cromwell for a further extension of England's power abroad. We were not at war with Spain, but on religious grounds alone any action against that country would meet with the general approval of the English nation. Two naval squadrons were fitted out, and in 1654 set sail under sealed orders. Admiral Penn, with 4000 troops aboard under General Venables, turned his prows westwards; while the second

squadron, under Blake, proceeded to the Mediterranean.

English trade with the countries of the Mediterranean had grown to considerable proportions, but as we kept no warships in those waters our traders were often ill-treated, and could obtain no redress. The inhabitants of Northern Africa in particular were most unblushing pirates, committing all kinds of atrocities on the shipping of all European nations, and making raids even as far as the British Isles, as mentioned in earlier pages. Blake's errand was to obtain recompense for past injuries to the English, and to obtain guarantees for better behaviour in the future.

The English squadron first made for Italy, where the Pope and the Grand Duke of Tuscany were called upon to pay large sums in settlement of various claims. The Duke's bill was £60,000. These dignitaries paid their long-standing accounts without any great ado, because Blake's fame was something to conjure up fear and respect. It is said that in June following, the sound of some guns off the coast sent a rumour flying through Italy that Blake was bombarding Civita Vecchia, the port of Rome; and the Pope,

in great alarm, ordered earthworks to be thrown up round his capital, until it was found that some drunken Dutch sailors had fired the guns to celebrate some festive day. Venice and Constantinople too now understood that annoyances and injuries to English merchantmen engaged in legitimate trade must cease, or penalties would be exacted.

On the other side of the Mediterranean the Dey of Tunis, not knowing the character of England's naval ambassador, treated the request for the liberation of all English captives with lofty insolence, and defied Blake to do his worst. Forthwith the English ships stood into the Bay of Porto Farino within musket shot of the Four hours' hot work by Blake's gunners battered the Dey's defences terribly, and the corsair fleet of nine ships that had considered itself safe under their batteries was burnt to the water's edge. One of Blake's demands was the restoration of an English ship, the "Princess," which the enemy had captured. She had, however, been converted into a corsair, and was burnt with the rest. When next Blake called to make a request to the Dey, it would meet with a very different reception. The pirate chief of the Mediterranean would not forget his lesson for many a long day, His neighbours, the Deys of Tripoli and Algiers, had learnt their lesson even before Blake paid his calls. These potentates received the English admiral with marked civility, and granted his demands with apparent friendliness, however much they dissembled their rage. It ought to be put on record that although we had been at war recently with Holland, the seamen of the "St George" and "Kent" desired to subscribe a dollar each in order to ransom some Dutch prisoners.

Blake's expedition in the cause of international justice must have been a profitable one, for he sent home a dozen or so ships loaded with treasure. On the return journey the English squadron put in at Malaga, where, it is said, occurred an incident that showed up strongly Blake's inherent love of justice, no less than his intense

regard for the honour of his country.

While ashore, some English seamen jeered at a procession of priests and ridiculed the Host which they carried, and the populace, roused to indignation by the appeal of a cleric, maltreated the offenders so badly that they barely escaped to their ships with their lives. Even from his men's own version of the affair the English admiral judged them to have been in the wrong, but in view of the position in the world now being claimed by England, he decided that the occasion warranted an exhibition of power. He therefore demanded the priest, who had called the people to vengeance, to attend upon his flagship, the "St George," within three hours, or he would reduce Malaga to ashes. Protestations were made, but Blake would not budge from his attitude, and within the allotted time the priest came aboard.



THE SURRENDER OF JAMAICA TO ADMIRAL WILLIAM PENN, 9TH MAY 1655

Blake held an inquiry; heard both sides; and then decided that his sailors had given the most gratuitous provocation. He declared that if the priest had laid a formal complaint, the offenders would have received severe punishment, as he would not permit them to insult the religion of any country, friend or foe, where they happened to call. But on the other hand England would not allow her sons to be judged or punished except by their own countrymen. With only this warning, the priest was treated with every civility and allowed to return ashore.

The foregoing is a pretty story to which credence has long been given. It is practically a pure fable as proved by the recent discovery of the diary of John Weale, who served aboard the flagship. It appears that Blake's squadron anchored in Malaga Roads at 6 p.m. on Sunday evening, 22nd November. They sailed next day at noon, and there had been no shore leave for either officers or men.

Although Blake was in very indifferent health when he returned home, he found that there was to be no rest allowed him, for the execution of Penn's sealed orders led Spain to declare war against us, and the whole country looked to Blake to take command of our fleet.

Penn had voyaged to West Indies. He first attacked the island of San Domingo, where the net result was that Venables lost 600 of his troops. Jamaica capitulated without offering fight. Then the English expedition got into difficulties. The soldiers were requested to lay aside their arms for agriculture, whereas they desired to be led against Vera Cruz or Cartagena, so that they could emulate Drake and gather riches and glory. Penn and Venables quarrelled; the general fell ill and returned to England, and shortly Penn followed him. The expedition ended most ingloriously for the pair of them, for they were thrown into the Tower after Cromwell and his Council had examined them. They were, however, released in a few weeks, and it was really something of a mystery why Penn was arrested, since any failure of the expedition was a military rather than a naval matter.

In March 1656 Admiral Blake hoisted his flag on the "Naseby," and headed a squadron for Cadiz in order to blockade the port and endeavour to capture the Spanish plate fleet, coming home from the West Indies. No attempt was made to attack Cadiz itself, for its defences had been vastly improved since the days of Drake. When the blockade had been maintained for several months Blake went off for a cruise to Aveiro, leaving Captain Stayner with only a few vessels to watch the port. Presently several Spanish warships appeared convoying a number of vessels laden with silver. While out at sea they had heard from some passing ship that Blake had been defeated, and thus unsuspectingly sailed into the clutches of Stayner, who set about his task with a grim determination that would have warmed the heart of the absent Blake. Only two of

the Spanish ships escaped, the remainder being boarded and

destroyed.

The Marquis of Badajos, ex-Viceroy of Mexico, was in charge of the plate fleet. He was returning home with his wife and children, and had with him a large fortune which he had accumulated in America. He fought his ship desperately, even after it had taken fire. His wife met her death from suffocation, whereupon the Spanish don had his children thrown overboard in the hope that they would be picked up; and some of them were rescued by the English, and were treated well. Badajos remained on board his vessel, and perished with her.

Stayner's reward for this hard-fought fight was a goodly store of gold and silver that was sent to England, and which, in 38 wagons, was drawn through London to the Tower to be coined into English

money.

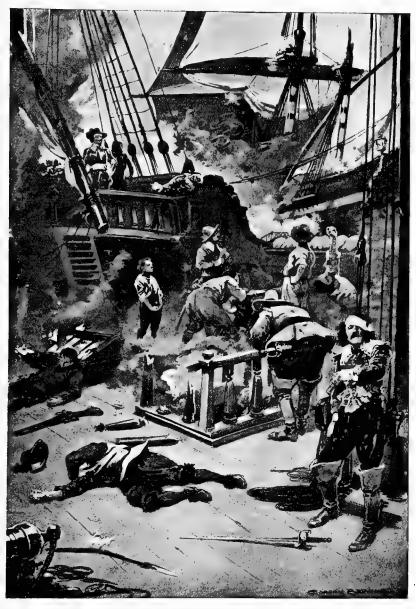
After blockading the Spanish coast for two years, Blake now decided upon an enterprise that was to rouse the wonder and admiration of Europe. He learnt that a fleet of 16 treasure-laden ships had taken refuge in the harbour of Santa Cruz, in one of the Canary Islands, in readiness to slip across to the Spanish coast when opportunity offered.

The harbour of Santa Cruz, which is like a narrow-necked bottle, was then most strongly fortified. The northern entrance was guarded by a castle upon which were mounted numerous heavy guns; the neck was lined with strong forts, and at intervals along the inner shores were still more forts, with earthworks to cover both guns and musketry. Nor was this all. The convoying squadron was at anchor inside with their guns pointing outwards upon any vessel that proposed to enter the harbour without permission. But to make assurance doubly sure the Spaniards had removed the gold, silver, and precious stones ashore.

The Spaniards never dreamt that Blake, or any other hostile seaman, would attempt the futile task of entering Santa Cruz Bay. The Spanish admiral, Don Diego Diagues, was quite aware that no ordinary obstacles would deter Blake, but he was confident that

Santa Čruz was beyond even his abnormal powers.

On Saturday, 18th April 1657, some of Blake's scouts appeared off the island, and thus the garrison was quite prepared on Monday morning to see the English squadron of 23 ships heading for the port. A vessel from Holland happened to be in Santa Cruz at the time. Now if anybody had a profound appreciation of Blake's capabilities it was a Dutchman. The Dutch skipper promptly applied to the Spanish admiral for permission to leave, only to be told that there was no need for alarm, as the forts would shatter Blake's ships before he could enter the harbour. "For all that, Blake will soon be among you," was the dogged reply. "Go if you will," said the Spanish don, "and let Blake come if he dare."



THE MARQUIS OF BADAJOS FOUGHT HIS SHIP DESPERATELY EVEN AFTER IT HAD TAKEN FIRE

The Dutchman showed his wisdom by going just in the nick of time, and Blake displayed his daring by coming into the bay with wind and tide in his favour.

With almost half a glance he recognised that Don Diagues had disposed his ships most disadvantageously for themselves. The convoying galleons were drawn up in a line, with their broadsides facing the entrance to the bay, and behind them were ten smaller ships in a half circle close to the shore, so as to be covered by the fleet and the forts. No arrangement could have suited the English better, for upon their entrance the inner ships and forts would be unable to use their guns without danger of hitting their own galleons.

Blake held a council of war and laid his plan before his captains. It was simply to sail straight into the harbour, wreak as much damage as possible, and get out again as best as they could. That it was dangerous went without saying, but danger was never any obstacle to Blake, and where he led, his men would follow. These daring Puritan fighters never neglected their religious duties, and early on Monday morning the fleet said its prayers, and considering the hell-throat they were about to enter, never had the seamen been in such need of the care of Providence.

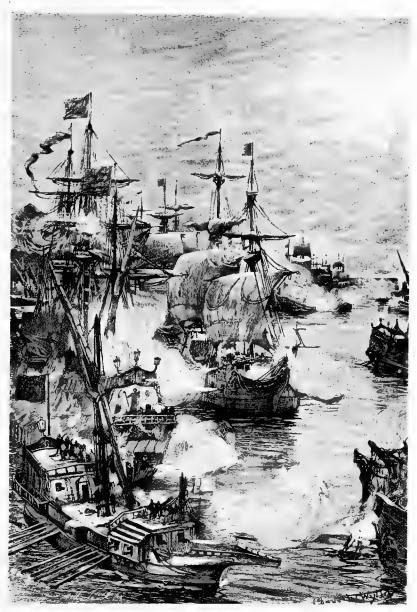
Stayner, in the "Speaker," led the first division past the outer batteries in order to attack the Spanish galleons, while Blake's division followed to divert the too pressing attention of the batteries upon Stayner. A tremendous cannonade was soon in progress. Words fail to depict the scene. The thunder of the guns, the pall of smoke, the lurid flames as a ship took fire!

The six galleons bore the brunt of the battle, while the guns of the smaller vessels and the batteries ashore had to remain silent. When at length the smoke lifted, it was seen that the Spanish convoy

had surrendered and English crews were going aboard.

Then Blake perceived that the situation had changed immensely to his disadvantage. Now that the big galleons had passed out of their possession, the other Spanish craft and the forts need have no scruples about hitting them. The English admiral at once relinquished all hope of securing any prizes. He promptly set fire to the galleons. He cannonaded the most dangerous batteries and closed in on the smaller ships, which he pounded into mere blazing wrecks, all within four hours of his entrance into the harbour. Blake's one regret was that he had insufficient men to land and search for the treasure. At six o'clock, with the wind dead ahead, the English ships warped out of the harbour in a wonderful exhibition of seamanship, considering much crippled rigging, blazing back at the batteries as they made for the open sea.

Santa Cruz harbour was a scene of terrible desolation. A seaquake and tornado combined could not have contrived more damage. Of the ships that were in the harbour in the morning only



A TREMENDOUS CANNONADE WAS SOON IN PROGRESS

one was afloat—and that one belonged to the Dutchman, who had the good sense to prefer his own opinion to that of the now mortified and astounded Spaniards. Our losses were 50 killed and 120 wounded.

The English nation had ceased almost to wonder at Blake's courage and resource; but this desperate exploit caused immense gratification, and the call for a national thanksgiving. Parliament specially thanked the great commander, and awarded him a jewel worth £500 as a token of his country's appreciation. Lord Clarendon only expressed the common opinion when he wrote. "The whole action was so miraculous that all men who knew the place wondered that any men, with what courage soever endued, would ever have undertaken it; and they could hardly persuade themselves to believe what they had done, whilst the Spaniards comforted themselves with the belief that they were devils and not men who had destroyed them in such a manner."

Meanwhile Blake was making his way home on the "St George." He was very ill. Seven years' almost incessant fighting afloat, hard work, close confinement, lack of fresh food and vegetables, brought on scurvy; and his old wound aggravated the complaint. Blake's one desire was to see the dear white cliffs of England once more, but he passed away before Plymouth was in sight. The "St George" entered the Sound with her flag at half mast, and

throughout the land there was great grief.

Robert Blake was laid to rest in Westminster Abbey, and it would have appeared impossible for the honour ever to have been challenged. Three years later, however, Charles II caused the remains to be removed and buried under Tyburn gibbet, the chief place for the execution of malefactors. But this purely personal spite could do nothing to impair the memory of Blake's glorious deeds, against which even keeping a king off his throne for a season counted very little.

CHAPTER IX

FROM THE RESTORATION TO THE DEATH OF WILLIAM III

It was on the night of 13th October 1651 when Charles II stole out of Shoreham in a little vessel loaded with coal, bound for Fècamp in France. On 12th May 1660 a naval squadron, under Sir Edward Montague, crossed over to Scheveling to escort him back to the throne of his fathers. The death of Blake was followed by that of Cromwell about a year later, and the removal of two markedly strong men paved the way for the restoration of the monarchy, for the nation perceived that a Parliament ruling without a king really

meant government by the Army.

Before Charles set out on his homeward voyage there was a grand dinner-party on board the "Naseby," one of the guests being the Prince of Orange, nephew of Charles, and afterwards William III. At this gathering occurred the significant ceremony of renaming those ships whose titles would be too reminiscent of matters that the restored king would fain forget. The "Naseby," for example, became "Charles"; the "Speaker," the "Mary"; the "Bradford," the "Success"; the "Lambert," the "Henrietta," etc. The squadron weighed and sailed for England, and immediately the restored monarch set foot on land at Dover, General Monk placed his sheathed sword in the hand of Charles in token of the fealty of the Army—and the Navy had already spoken for itself in being the first to greet the King and carry him back to England. Sir Edward Montague was created Earl of Sandwich, and knighthoods were conferred on Admirals Lawson, Stayner, and Ayscough.

It was probably because it was the first of the two services to welcome him, that caused Charles II to have some affection and regard for the Navy, as shown by his rather frequent visits to the naval arsenals and his interest in shipbuilding; but the King preferred to waste money in selfish personal pleasures that would have been better spent on the fleet, and thus the naval power built up under Cromwell was permitted to decline. The fleet to which Charles succeeded consisted of nearly 160 ships, including yachts and a few ketches. The last named were mortar-boats such as made their first appearance at the late bombardment of Algiers by the French. Fortunately the new Lord High Admiral, Prince James, Duke of

KING CHARLES II RETURNING TO ENGLAND-EMBARKATION AT SCHEVELING, 23RD MAY 1660

FROM THE RESTORATION TO THE DEATH OF WILLIAM III 157

York, was a capable administrator, and was assisted ably by Samuel Pepys, who had risen to a position about equivalent to our present-

day Secretary of the Admiralty.

Charles married Catherine of Braganza of Portugal, and as part of her dowry, he received Tangier in Morocco on the Strait of Gibraltar and the island of Bombay. Cromwell had assisted France against Spain in 1658, for which we received Dunkirk, which was some atonement for our loss of Calais, and immensely improved our command of the Channel. Charles now sold Dunkirk to Louis XIV of France for £200,000. It was doubtless good policy to cement good relations with the French, but the sacrifice of Dunkirk by no means met with popular approval in England. Charles, however, was quite satisfied, for in addition to receiving the big lump sum he would save £120,000 a year. Nor did the spending of money on Tangier please the nation, for the command of the entrance to the Mediterranean was not then recognised as a matter of supreme importance.

Public attention was diverted from the foregoing matters by the continued progress of Holland, whose mercantile marine had outlived the disasters to its navy a dozen years earlier. The Dutch merchant fleet numbered quite 10,000 sail, manned by about 170,000 seamen, and these "waggoners of the seas" largely controlled the carrying trade of the world, including even a great deal of the Spanish commerce with her American possessions. But the English instinct for commerce, asserting itself in every direction, we were becoming more acute rivals of the Dutch; but otherwise we had no cause of offence with a people, with whom we had a common religion, and a common necessity to beware of the aspira-

tions of France.

Charles, however, disliked Holland, if only because John De Witt was placed at the head of the government instead of the Prince of Orange. He courted the support of Louis XIV, with whom he agreed not to assist the Dutch against France, or to interfere with French designs on the Dutch Netherlands; and he lost no opportunity of accentuating any possible grievance we might have against the Dutch. Trouble arose in the colonies. In 1609 Henry Hudson explored the Hudson river as far as the present day Albany in the State of New York, but a few years later the Dutch made settlements in that region. The English viewed them as intruders, and now captured their city of New Amsterdam (New York). This, in conjunction with similar incidents elsewhere, was quite sufficient to cause a rupture between England and Holland, and war was declared in 1665.

H.R.H. the Duke of York, in April, took out three squadrons, totalling 110 sail (besides about 20 fire-ships), mounting 4500 guns and manned by 22,000 men. The Duke was in supreme command and on his flagship, the "Royal Charles," was Sir William Penn,

while other admirals in the first division were Sir John Lawson and Sir William Berkeley. Prince Rupert, in command of the second division, had with him Admiral Christopher Myngs. The Earl of Sandwich commanded the third division, one of his admirals being Sir George Ayscough. While fitting out, our fleet lost one of its finest ships, the "London" (80 guns), blowing up at the Nore with the loss of 300 lives.

The Dutch fleet consisted of 103 sail, excluding fireships and a dozen brigantines. Some of the vessels were bigger than any in our fleet, but the Dutch ships carried guns less in number and of lighter calibre than the English, because the shallow waters of Holland necessitated ships of less draught than ours. The chief command was entrusted to Baron Opdam, a pupil of Van Tromp; and with him were Evertz and Cornelius Van Tromp, son of a

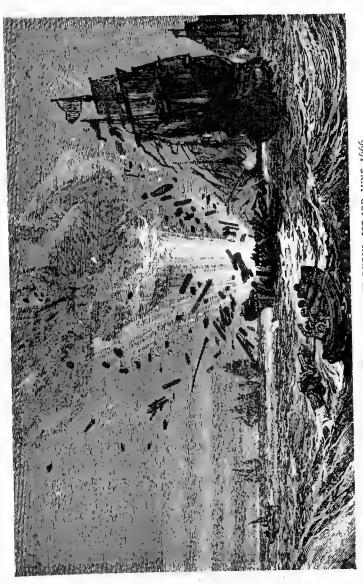
famous father.

The two fleets sighted each other on 1st June, and two days later, off Southwold in Norfolk, engaged in a very close action. English line extended for several miles, the Lord High Admiral leading the centre and meeting Opdam's division. After a vigorous cannonading in a general action, the "Royal Charles" became hotly engaged with Opdam's flagship, which latter was blown up, entailing the destruction of the Dutch leader and practically the whole of the crew. This disaster threw the Dutch into confusion, ships fouling each other and causing several to be burnt by a fireship; and in these circumstances they were laid open to a crushing defeat. We captured, sunk or burnt about 24 ships and took 2500 prisoners; while 8000 men were killed or wounded. Our losses in comparison were trifling: one ship, the "Charity," 40 guns, captured; 250 men killed and 350 wounded. Among our dead were several notabilities, viz., Vice-Admirals Lawson and Sampson and Captains the Earls of Marlborough and Portland. The young Earl of Falmouth and Lord Muskerry, who were volunteers on the "Royal Charles," were struck down under the eyes of their admiral.

The battle lasted from 3.30 a.m. to I p.m., and thus when the Dutch retreated there remained quite eight hours' light in which to give chase, but the English took no advantage of the opportunity. Criticism of his failure to drive home the victory led to the resignation of the Duke of York; and Monk, who was now the Earl of

Albemarle, assumed the supreme command.

Twelve months later the Dutch had not only fitted out an excellent fleet, but also expected to receive the assistance of the French, with whom temporarily they were on better terms. The ships consisted of 71 men-of-war, 12 frigates, and 13 smaller craft, with 4716 guns and 22,000 men, under the veteran De Ruyter, Van Tromp, and Evertz. The English fleet of 90 ships took the sea under Albemarle, who detached Prince Rupert with 30 ships to the entrance of the Channel to prevent a French squadron coming



DEFEAT OF THE BRITISH BY THE DUTCH, IST-3RD JUNE 1666

to swell the Dutch fleet. Thus it came about that on 1st June, near the Goodwins, Albemarle found himself faced by the then best commander in the world, leading a much superior force; and the English commander's well-proved courage led him to make the mistake of bearing down on the Dutch, when his policy should have been to avoid an engagement until Prince Rupert could rejoin him.

The battle lasted four days. On the first, the ships engaged at very close quarters with a frightful loss of life on each side. The chief incidents of the day may only be barely outlined. Tromp's own ship was so badly battered that he had to transfer his flag to another; De Ruyter had several narrow escapes; Evertz was killed and one Dutch ship blew up. On the English side Sir John Harman was wounded and his ship badly shattered; and Admiral Sir William Berkeley, in the "Swiftsure," was killed in the course of a desperate effort to break the enemy's line. The "Swiftsure" and the "Essex" were captured. So impressed were the Dutch by Berkeley's bravery that they embalmed his body, and the States-General requested Charles II to intimate his pleasure concerning the disposal of the body of one of England's heroes.

During the early part of the second day there was little or no wind and both fleets spent the morning in refitting; but shortly before noon the action recommenced. Tromp was narrowly saved from capture by De Ruyter and the Dutch Admiral Hulst was killed; but at the end of the day's fighting we had lost three additional ships. Albemarle now regretted his impetuosity, especially as De Ruyter received a reinforcement of 16 ships, leaving our fleet no option but to fall back until assistance arrived. To facilitate his retreat the English commander-in-chief blew up his own flagship and burnt several other cripples. Only sixteen of his ships

were now in a condition to fight.

About the middle of the third day Prince Rupert hove in sight and De Ruyter drew off. But we did not escape loss on this otherwise uneventful day, for Sir George Ayscough ran the "Royal Prince" of 78 guns on to the Galloper Sands, where the Dutch captured and burnt her. The next day De Ruyter, quite satisfied with the result of the protracted fight, would have left for home, but Albemarle and Prince Rupert came to the attack, only to be worsted again. One particularly brilliant officer was lost to us this day in Sir Christopher Myngs. When a musket ball took him in the throat he refused to stop to have the terrible wound dressed. Staunching the blood with his hand he still directed the fight until another shot killed him.

Albemarle at length withdrew, having lost ten ships, while 600 of his men were killed and over 1000 wounded; 2000 of our men were taken captive, among them Sir George Asycough. The Dutch lost six ships. Although Albemarle was defeated he gained rather





than lost honour in his bitter struggle against superior numbers, as borne out by the testimony of De Witt, who said: "Their defeat did them more honour than all their former victories. The Dutch fleet could never have been brought on again after such a fight as that on the first day . . . English ships might be burnt but English courage was invincible."

Before the end of the month De Ruyter left the Texel with 60 sail and several transports loaded with troops, and other vessels joined him before he cleared the home waters. He proposed to sail into the Thames, but thought better of it when he found the English fleet of 80 sail was almost fitted out. This good result was due to the almost feverish energy of Admiral Sir William Penn, who had been appointed one of the Commissioners of the Navy. De Ruyter contented himself with merely blockading the mouth of the river until the English fleet put out to sea on 19th July; and five days later Albemarle challenged the Dutch off North Foreland. Our fleet consisted of 89 men-of-war, the smallest of which was a 40-gun frigate, and a score of fireships. A vessel new in the English service was the "Loyal London," manned by 800 men, and the finest warship on any sea. She was the flagship of Sir Jeremiah Smith. The Dutch fleet numbered only one ship less than ours, and the fact that De Ruyter had 24 fireships showed what reliance the Dutch placed upon that arm of their service.

In the battle that ensued Sir Thomas Allen led our van with the white squadron; the English centre was commanded by the Duke, with whom was Prince Rupert on the same ship; and Admiral Smith was in charge of the rear, or blue, squadron. Sir Thomas Allen dealt very effectively with the Dutch squadron opposed to him: Admirals De Vries and Coenders were killed; Admiral Bancquert's ship was captured, as was the "Sneik" of 50 guns. In the centre the Dutch ship "Guelderland" of 66 guns was disabled and De Ruyter was very hardly pressed. Tromp was equally unsuccessful against Sir Jeremiah Smith, his ship being riddled and losing a hundred men, and the Dutch vice-admiral himself was nearly taken by Sir Edward Spragge. The fortunes of the day went all one way, although De Ruyter made heroic efforts to avoid defeat. The English casualties were comparatively few, and only one ship was lost, namely, the "Resolution," which was burnt by a fireship. The Dutch lost 20 sail, captured, sunk or burnt, while 7000 men were killed or wounded.

Having thus gained command of the sea, Sir Robert Holmes, with 9 frigates and a number of fireships, crossed over to the Dutch coast with designs upon a fleet of merchantmen in the river Vlie. Into the midst of the crowded shipping Holmes sent fireships, which he followed up with pinnaces to complete the work of destruction. The island of Schelling was next attacked, and the burning of the town of Baudaris marked our first use of a naval brigade ashore.

This offensive force consisted of about a dozen companies of seamen

armed with muskets and supported by small guns.

France was now prepared to do more than merely promise to assist Holland, and at Rochelle a squadron of French ships awaited instructions. Since his last tussle with the British De Ruyter had been home and effected repairs and added to his strength. He now sailed to pick up with his French allies, but Prince Rupert intervened with superior numbers and the Dutchman retired to Boulogne roads. In the meantime the French had sailed to meet De Ruyter, but his ships were dispersed during a storm, which gave Sir Thomas Allen an opportunity of capturing one of them.

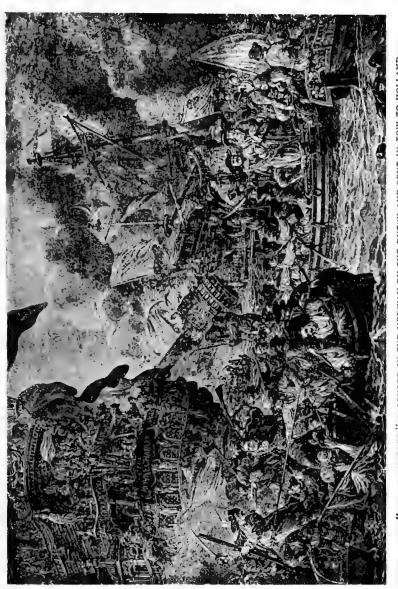
During the six years that Charles II had been on the throne he had diverted large sums of money that should have been spent on the Navy. Matters were particularly bad at the end of the year, when London from the Tower to Smithfield lay in ruins, as the result of the Great Fire in September 2nd-6th. The prolonged naval operations against the Dutch meant continual expenditure, and consequently Charles welcomed the suggestion that the war should be ended, and it was arranged for plenipotentiaries to discuss terms at Breda.

According to custom Charles laid up in harbour the greater part of the fleet for winter, only keeping in commission a few vessels in the Downs and at Portsmouth. But in the early months of 1667 he entered upon a disastrous cheeseparing naval policy. Instead of getting a big fleet ready for an emergency he decided to adopt the defensive, relying upon the negotiations at Breda to bring about peace. The improvement of the fortifications on the Medway and at Portsmouth, which were undertaken, could not possibly atone for the King's trifling with the national safety.

The conference at Breda breaking down, owing to the English claiming Pularoon, gave the Dutch an opportunity of which they were not slow to take advantage. They were well prepared to take the offensive and were quite aware that we had only small squadrons at the Nore and Spithead, and a third in the West Indies. On 10th May the last-named, under Sir John Harman, gained a smart victory over a combined fleet of Dutch and French sail, of which he burnt or sank nearly a dozen. About this time, too, we

captured St Eustatia, Tobago and Surinam.

On 7th June 1667 De Ruyter appeared at the mouth of the Thames with a fleet of 60 sail and a number of transports loaded with troops. First the Dutch commander despatched frigates and fireships up the river to attack some merchant ships lying below Tilbury, awaiting a convoy to the West Indies. For lack of wind, however, the frigates could not reach the merchantmen, which were taken further up the river out of danger. The Dutch then proceeded to bombard and capture Sheerness, where only fifteen guns



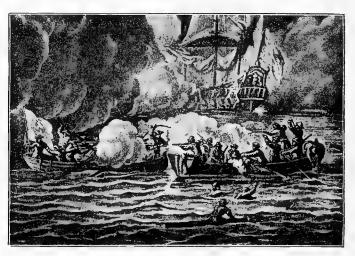
THE "ROYAL CHARLES" CAPTURED IN THE MEDWAY BY THE DUTCH AND SENT IN TOW TO HOLLAND (From the Picture by D. Lagenoyd)

were mounted, which were carried off to the Dutch ships, together

with a large quantity of miscellaneous stores.

The effect in London of these depredations can be imagined better than described. Quite a panic was created. The Duke of Albemarle took command of the defence of Chatham, where he found an appalling state of affairs—the docks were almost deserted, insufficient labour to construct batteries, and practically no attempt being made to offer the slightest resistance to the enemy. He threw up temporary forts, sunk ships and constructed a boom across the Medway to impede the advance of the enemy.

On 10th June, however, De Ruyter entered the Medway, and,



BOAT ACTION BETWEEN THE BRITISH AND THE DUTCH IN THE THAMES

forcing the boom, a couple of Dutch vessels opened fire on Upnor Castle. Above that point lay some of the best ships in our Navy, but they were unmanned and without stores or victuals. De Ruyter fell upon these, burning the "Royal James," 82 guns, "Royal Oak," 76 guns, and "Loyal London," 90 guns; and the "Royal Charles," 90 guns, he captured and sent in tow to Holland. This humiliating disaster took place at the very doors of London. It was all the more aggravating because the country that was mistress of the sea under Cromwell's rule was still rich enough, strong enough, and her sons brave enough to protect its own coasts, if only it were honestly governed.

Perhaps the lesson was not a too expensive one if, once for all, it drove into English minds the absolute recognition of the principle first laid down by Alfred the Great, namely, that no maritime state is safe unless she is in possession of a fleet strong enough to protect

her coasts from marauding enemies. All other defences are only auxiliaries: the enemy must be met and defeated on the water. In later times the exigencies of party politics have sometimes tended to over-economise in naval matters, but the country has generally been aroused to the danger and the money has been forthcoming to meet the Navy's needs.

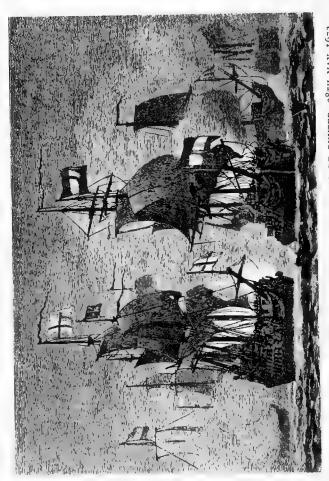
The Treaty of Breda in July 1667 ended the war with Holland. Some of the chief conditions were that each country should keep its own conquests, and thus we retained New York. Our Navigation Act was to be relaxed and Dutch vessels were to be permitted to bring Dutch, Flemish, and German goods into our ports. It was, however, only a patched-up peace, for neither country had secured that definite naval supremacy that was so eminently desirable for the protection of commerce and the establishment of trading posts abroad. The Eastern trade, in particular, gave rise to eager competition, for voyages to the East Indies often meant a profit of 200 per cent. on the outlay.

Fresh trouble arose in 1671, when a British squadron under Sir Robert Holmes met a Dutch fleet convoying merchantmen from the Eastern Mediterranean. The Dutch admiral refused to give the customary salute, which Holmes fired guns to enforce. The result was a running fight of three days, in which the British captured one warship and a number of merchantmen. Holland was indignant, but had her hands full at home with an imminent French invasion by land, and consequently was loth to add to her difficulties.

Charles, however, succeeded in bringing about war in March 1672, although at heart the English nation desired to be friends with Protestant Holland. But our King was only a pawn in the game of Louis XIV, who bribed Charles with £150,000 and a promise of £225,000 a year as long as the war lasted; and further he undertook to lend us a squadron of 36 ships to assist the English fleet

in pulling the nuts out of the fire for France.

For the attack upon Holland the allied fleet formed three divisions under the Duke of York, the Earl of Sandwich, and Count D'Estrees respectively. All told, the fleet numbered IoI sail, with 6000 guns, and the crews totalled 32,000 men. Against this immense fleet the Dutch put 90 sail under De Ruyter, who attacked the allies in Southwold Bay, on 28th May, first coming into conflict with the French squadron, which could not cope with the vigorous Dutchman, and forthwith sailed out of the fight. De Ruyter then attacked the squadron under the Duke of York, whose flagship, the "St Michael," was so battered that the Duke removed himself and his flag to the "Loyal London." The third squadron found itself engaged in a terribly hot conflict. The Earl of Sandwich, on the "Royal James," in particular, was occupied with the "Great Holland" of 80 guns, shortly assisted by a squadron of five ships



action between the earl of sandwich and admiral de ruyter, $28 \mathrm{TH}$ may $16 7 \mathrm{2}$

FROM THE RESTORATION TO THE DEATH OF WILLIAM III 167 under Admiral Van Ghent. In a five hours' fight the "Royal James" lost her spars and drifted away from her companions. She contrived to beat off the "Great Holland," and three of Van Ghent's squadron were sunk and the admiral himself killed. The "Royal James," which had lost more than half her crew of a thousand, took fire and was totally destroyed, involving the loss of

the rest of the crew and the Earl of Sandwich.

When the two British squadrons could unite, the battle raged more furiously than ever, and indeed, De Ruyter, who was wounded, declared the action to be the most desperate he had ever engaged in, and his experience was exceedingly wide and varied. Not until evening did the opposing fleets separate, the Dutch making off without pursuit. In addition to the "Royal James," we lost three other ships, and the Dutch likewise were short of four. Quite 2000 of our seamen were killed, and a similar number wounded. The Dutch losses do not appear to have been recorded, but they must necessarily have been very heavy; in addition to the loss of Admiral Ghent, Cornelius Evertz was killed and De Ruyter was wounded.

Holland had at least held her own in this last sea battle; at home she had repelled the French fleet; and the French troops she had flooded out of the country by cutting the dykes. There was, however, much internal dissension in the country; the two De Witts were murdered, and the Prince of Orange was placed at the head of the Government. This last event, at any rate, removed

one of Charles's grievances against the Dutch.

In the following spring (1673) the English fleet of about sixty sail took the sea, with Prince Rupert in command; under him were Sir Edward Spragge and Sir John Harman. The French were still our allies and added a squadron of 30 ships. Twice the rival fleets met without any definite result. Once more they encountered each other a little north of the Texel, and at the first shot all of the French ships, save four under Admiral de Martel, sailed away, leaving the English with only 60 or 70 ships to do battle with about 100 Dutch sail under De Ruyter and Tromp. Thus left in the lurch, Rupert decided to retreat in a running fight towards England.

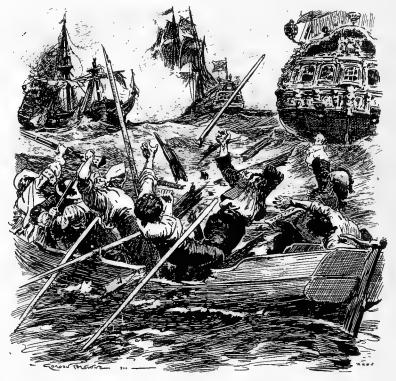
A marked feature of the day was the manner in which Spragge on the "Royal Prince" and Tromp on the "Golden Lion" battered each other from the outset. At the end of three hours' desperate fighting the "Royal Prince" was dismasted, the guns on the upper deck were disabled, and of the whole crew of 750 men more than half were killed and wounded. Spragge removed his flag to the "St George"; Tromp transferred to the "Comet"; and the duel was renewed. After another hot encounter the "St George" lost her mainmast, and Spragge took to his barge in order to gain the "Royal Charles" and continue the fight; but the barge was sunk by a shot and the gallant admiral was drowned. The running fight,

resulting in heavy losses on both sides, was continued until nightfall, when the Dutch retired, although they had had the better of the

argument.

But for the French basely desert

But for the French basely deserting Prince Rupert, the Dutch probably would have suffered a severe defeat. It was evident that the French never intended to give any real assistance, and De Martel



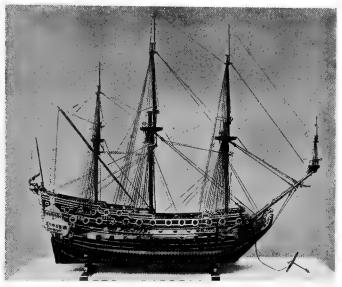
ADMIRAL SPRAGGE TOOK TO HIS BARGE, WHICH WAS SUNK BY A SHOT

was thrown into the Bastille for exceeding his instructions. The Dutch did not hesitate to say that Louis had made a catspaw of Charles, had hired the English to fight for him, and of course our only concern was to earn our wages. The incident was an illuminating commentary on the action of Charles, who was endangering the safety of his country for the sake of the money which Louis dangled before him.

The Treaty of London of 1674 ended the third Dutch war. Holland engaged to pay England 800,000 crowns compensation, to recognise her conquests outside Europe, and to acknowledge

FROM THE RESTORATION TO THE DEATH OF WILLIAM III 169 her supremacy on the sea north of Cape Finisterre. Our East India Company had various grievances against the Dutch East India Company, and these were to be settled by arbitration. Charles II promised not to assist the enemies of Holland. Three years later Prince William of Orange married Mary, daughter of James, Duke of York, and this more than anything else marked the end of our hostility towards the Dutch.

Although we had now deposed Holland from her position as the first maritime power of the seventeenth century, the rise of



MODEL OF THE "ROYAL CHARLES" (South Kensington Museum)

England to sea power was not long to remain unchallenged. The proud title of "Mistress of the Sea" would entail a longer struggle with a more powerful opponent, and with a few monarchs of the character of Charles upon her throne England could say good-bye to her aspirations.

France was to prove our great rival in the very near future, yet Charles was trafficking secretly with Louis XIV, assisting him to gain the supremacy of Western Europe. Louis was an utter despot, and by an alliance with him Charles was imperilling English civil and religious liberties, which we hold dearer than trade. Louis was afraid that the English Parliament would desire to make war against him in order to check his policy of European aggression, and agreed to pay Charles £100,000 a year if he would dissolve

Parliament. In return for still another secret subsidy Charles undertook not to make any agreement with other European powers without the consent of Louis; and thus, although Charles denied the right of Parliament to control his foreign policy, he was selling

the right to a vitally interested country.

In 1670 we had sent Sir Edward Spragge to chastise the pirates of Algiers, which he did so thoroughly that the Algerines revolted against the Dev and murdered him. Now in January 1676 we despatched a squadron to deal out similar justice to the pirates of Tripoli. Sir John Narborough was in command, and with him served Lieutenant Cloudesley Shovel, who had run away from home to sea and acted as cabin-boy to Sir John. As the admiral had commenced his own service as cabin-boy to Sir Christopher Myngs, he interested himself in the runaway and had him thoroughly instructed in the elements of his profession. Very speedily Shovel commenced to repay Sir John for his patronage. During an action he swam through the enemy's line carrying in his mouth a despatch which Narborough urgently desired to be delivered to a brother commander. He was now put in charge of the boats that were sent by night into the inner harbour to destroy the corsair ships lying there. Shovel seized the pirates' guard-boat and prevented an alarm being given. He surprised the ships, burnt them and returned to his leader without the loss of a single man. pedition to the Mediterranean was the last naval exploit of any importance in the reign of Charles II, who died in 1685.

With James II on the throne the Navy fared well to come into its own, for, as Duke of York, the new king had risked his life freely in battles at sea, and he knew the Navy's needs from practical experience. Almost immediately a special commission of experts was appointed to supersede the Navy Board. Sir Anthony Deane and Sir Phineas Pett were two of the commissioners, and as both were noted shipbuilders some new vessels were added to the Navy without delay. James caused the removal of various abuses that was calculated to please the seamen, but the most important innovation was the setting aside of £1,600,000 per annum, paid quarterly, for the upkeep of the Navy. Hitherto fluctuating means and a lack of settled policy had caused the Navy sometimes to suffer long periods of neglect, whereas a definite income would

ensure steady progress.

James, however, desired to become despotic and was bent upon restoring the Roman Catholic religion in England; and in the Navy he spoilt the first good impressions by having Mass performed aboard some of the ships, which naturally gave offence to the greater Protestant section of the seamen, just as there was trouble in the army because the King was officering it with Roman Catholics.

Rapid history was soon in the making. William of Orange was invited to take the throne, and on 1st November 1688, he sailed

FROM THE RESTORATION TO THE DEATH OF WILLIAM III

from Holland with a fleet of 500 sail, conveying 14,000 troops. If James had conciliated the Navy, William might have been unable to effect his purpose; but the greater part of the fleet deserted the King, and the van squadron of the invading fleet of the Prince of Orange was commanded by Admiral Arthur Herbert, whom James had dismissed from the service on account of religious differences.

The naval force left to the King was commanded by Sir Roger



THE PRINCE OF ORANGE, AFTERWARDS WILLIAM III, LANDING AT TORBAY, 5TH NOVEMBER 1688

(Reduced engraving from the Painting by J. M. W. Turner, R.A.)

Strickland, a Roman Catholic, who was very unpopular. His squadron at the Nore was joined by Lord Dartmouth with other vessels, that raised the fleet to forty sail. A fleet with any heart in its business would have gone over to Holland and attacked the oncoming expedition, which was the plan advocated by Sir William Jennings. It was supposed that the Prince of Orange would endeavour to land on the east coast, and therefore Strickland remained at the Nore; but William made for Torbay and had got his troops ashore before Strickland put in an appearance, having been delayed by a storm. From that point any hope that James might have of saving the situation lay with the army, which proved a broken

reed, when John Churchill, afterwards Duke of Marlborough, one of his chief generals, went over to the side of William.

On 11th December James attempted to escape to France, but was captured and brought to London, but on the 23rd, with the connivance of William, he got safely out of the country and took refuge at the court of Louis XIV.

The British fleet at this time consisted of 9 first-rates, II second-rates, 39 third-rates, 4I fourth-rates, 48 smaller craft, and 26 fire-ships. The whole were manned by 42,000 men. The guns numbered 6930. The largest ship in the Navy was the "Britannia" of 1730 tons, 100 guns, and 780 men.

William III was not a popular king, thanks to his cold and austere nature and his fondness for Holland. But he was just the man to play the difficult part of King of England in the particularly

troublous time that was at hand.

Particularly was he sternly opposed to the aggressions of Louis XIV. Henceforth there would be no truckling to the monarch who was threatening the balance of power in Europe, and whose creation of a powerful Navy showed his intention to attempt on the sea, what already he had largely accomplished on land. It was only natural that Louis would espouse the cause of the deposed James, for nothing would suit French plans better than to have a tool occupying the English throne.

In March 1689 James landed in Ireland, where the exile was likely to find more support than in England. Admiral Sir Arthur Herbert sailed for Cork with 20 ships, and off Bantry Bay on 1st May encountered the French squadron that had brought James over from France. The action which followed, although indecisive, was followed by Sir Arthur Herbert being created Earl of Torrington; and Cloudesley Shovel received a knighthood for

distinguishing himself in command of the "Edgar."

War between England and France having been declared on 17th May, Louis commenced to fit out a fleet of 78 vessels, exclusive of fireships, which put out under Admiral Count de Tourville in order to wipe out England on the sea and prepare the way for an invasion. Although the Dutch sent a squadron of ships to our aid, Lord Torrington's combined force did not exceed sixty ships. The opposing fleets met off Beachy Head on 30th June 1690.

From our point of view this battle was intensely unsatisfactory. The Dutch squadron first entered into action with the French, and half an hour later Admiral Delaval with our Blue division engaged the enemy's rear; but Torrington was a considerable time in getting his station. Meanwhile the Dutch, being exposed to the fire of the whole French fleet, were severely mauled. The weather being light, some of our vessels did not get into the firing zone, and Torrington's own flagship did not fire a single shot. Later the tide separ-

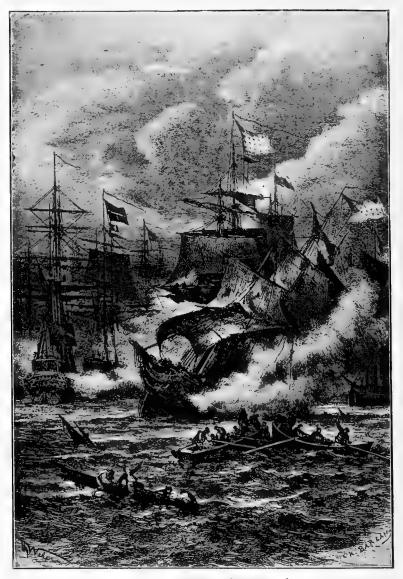
ated the fleets, and Torrington retreated and made for the Thames in order to secure reinforcements. While the English divisions had suffered but slight casualties, our Dutch friends lost six ships and had two admirals killed. The Dutch did not hesitate to blame Torrington for his lack of support. There was great indignation in England at his lukewarmness, for which he was court-martialled and deprived of his commission. It is a moot point whether Torrington's action was not correct in the circumstances, for if he had lost his fleet the invasion by the French would have been assured, whereas they did no more than burn Teignmouth. unfortunate part of the business lay in our allies being sacrificed, whereas had it been one of our own divisions less acute feeling would have been displayed. One effect was the immediate strengthening of the English Navy. Thirty new ships of from 60 to 80 guns each were laid down. During the next twenty-three months there were several minor affairs chiefly in the East Indies and off the coast of Ireland; while in England and France extensive preparations were in progress for the next great struggle.

Louis planned for Count Tourville to keep the Channel safe with his fleet, while 300 transports could cross and dump a great force of troops on our shores. We did not under-estimate the danger, and our Dutch friends again lent their assistance with a couple of squadrons under Admiral Allemande. Early in May 1692 the French were ready for their great venture, and Admiral Edward Russell with the allied fleet was cruising between the Isle of Wight and Cape La Hogue in readiness to intercept and offer fight to the

enemy.

Admiral Russell's great force was in three divisions: his own squadron (Red) of 31 ships, with Vice-Admiral Sir Ralph Delaval and Rear-Admiral Sir Cloudesley Shovel; the Blue squadron of 32 ships was under Sir John Ashby, with Vice-Admiral Sir George Rooke and Rear-Admiral Richard Carter. Our Dutch allies mustered 36 ships. Altogether the allied fleet totalled 99 ships, mounting 6990 guns and carrying 40,000 men. Count de Tourville's ships numbered only 63, but some of them were of large size and of great gun power; his flagship, for example, was the "Soleil Royal" of 1940 tons and 104 guns, claiming to be the latest word in warships.

The two fleets sighted each other on 16th May. It has been asserted that Tourville was ignorant that the Dutch had swelled our strength or he would not have signalled at once to engage. It is improbable that he was so badly informed, and in any case must have learnt it in time to avoid, rather than seek, conflict; but he was inspired by confidence in his own skill and the quality of his ships, and more than that, he felt compelled to obey the instructions of Louis, just as Medina Sidonia carried out his orders with fatal obstinacy rather than accept responsibility, which is the true test of courage.



BATTLE OF LA HOGUE, 16TH MAY 1692

Both sides entered the fight with avidity. The "Soleil Royal" and four or five other big ships made a desperate onslaught on Russell's flagship, the "Britannia," and two others. For a couple of hours they were hotly engaged, by which time the "Soleil Royal" was so badly cut up in sails, rigging and spars that she had to be towed out of action. The French fleet in general met with little better fortune than their leader. In the middle of the afternoon a thick fog interrupted the battle and under its cover Tourville set northwards. On the pall lifting, Admiral Russell gave chase, which continued all through the night and the following day, during which the French lost several ships and our Admiral Carter was mortally wounded.

At length Tourville anchored off Cape la Hogue. On the 22nd one of his divisions moved from the main body towards the Race of Alderney. Upon the English attacking, the "Soleil Royal" was run ashore near Cherbourg, where Sir Ralph Delaval burnt her along with two other ships. The remaining vessels of this French division were in danger of annihilation. Their only hope lay in retreat, and the enemy blocked the way, save through the dreaded Race, which the shallows and the fierce tidal currents make a veritable death-trap for even small vessels. But the big French menof-war had to risk it, unless they wished to be towed as prizes to

Plymouth Sound, and

"Helter skelter through the blue,
Like a crowd of frightened porpoises a shoal of sharks pursue,
Came crowding ship on ship to Saint Malo on the Rance,
With the English fleet in view."

Twenty of Tourville's ships contrived to get through the perilous passage and make St Malo. The remaining vessels at La Hogue were attacked in the harbour at night by a force in boats under Sir George Rooke, there not being sufficient water to float even a frigate. The guns of the forts and shipping could not prevent Rooke setting fire to six men-of-war; and he would have destroyed more, but that they were high and dry ashore and guarded by a large force of

troops.

In this memorable naval battle the French lost sixteen splendid vessels, sunk or burnt, and a large number of transports. In England the victory caused great rejoicings, for it put an end to any immediate fear of invasion. In some quarters it was considered that Admiral Russell might have done better, and for a time he was relieved of his command of the fleet. This was due more to political reasons than naval, for the Admiral was known to lean towards James, with whom he had corresponded. Two years later, however, he was again at sea, and in due course became the Earl of Orford and the First Lord of the Admiralty.

Nothing daunted by their defeat at La Hogue, the French set about restoring their fleet, and early in 1693 De Tourville took the sea with a fleet of more than 100 sail. In June Sir George Rooke with 13 English and 10 Dutch warships was convoying a fleet of English, Dutch, Swedish and Danish merchantmen to the Levant. When off Lagos De Tourville bore down on Rooke. Although faced by such tremendous odds and hampered by his charges, the English admiral acted with rare courage and evinced the greatest possible skill. He signalled to the merchantmen to separate and



ADMIRAL BENBOW

(After the Painting by Sir Godfrey Kneller, R.A.)

make for Cadiz and other Spanish ports, while he would occupy the enemy to the best of his power. The French admiral took but little advantage of his opportunity, and only captured one English and two Dutch warships and about 90 merchantmen.

For this success the French were to pay rather dearly. Commodore John Benbow bombarded St Malo smashed up some ships there. Lord Berkeley with a squadron attacked Brest, where he was unable to make much effect on the strong fortifications; but he burnt Dieppe partially destroyed Havre. Sir Cloudesley Shovel with another squadron bombarded Calais and worked enormous damage. Admiral Russell with a powerful

squadron set out for the Mediterranean with sixty-three English and Dutch sail and forced De Tourville to raise the siege of Barcelona and retire to Toulon, and on the way thither he lost a couple of line-of-battle ships. Once under the guns of Toulon, De Tourville would not engage with Russell, and so we snatched from the French the supremacy of the Middle Sea practically without striking a blow.

The war was ended by the Treaty of Ryswick (1697), under which Louis XIV recognised William III as King of England, and promised not to encourage any discontented subjects. Any territory France and England had taken from each other was to be restored. Abroad we were making considerable progress. In 1690 we added St Christopher to our West Indian possessions; and in

FROM THE RESTORATION TO THE DEATH OF WILLIAM III 177 India in 1696 Fort William was built by the East India Company,

Calcutta having been founded ten years earlier.

William III effected notable improvements in the conditions of naval service; and in particular Parliament voted two million sterling for providing new ships and guns, and the completion of Portsmouth dockyard. A regular corps of marines was established; Greenwich hospital was founded; and the first Eddystone lighthouse was erected in 1698. The first lighthouse ever known was built at Alexandria in 300 B.C., and probably our earliest was one erected on the Norfolk coast in 1272.

King William died in March 1702 (Queen Mary pre-deceased him by eight years), at a time when his services could be ill-spared. James II had died six months earlier, and Louis XIV proclaimed his son, James Edward, King of England, an example which was followed by Spain. England was roused to anger at the insult, which in itself was sufficient to lead to a fresh outbreak of war. But war was inevitable from another grave cause. Charles II of Spain, having no heir, had nominated as his successor Philip of Anjou, grandson of Louis XIV, who had married a Spanish princess. This would mean making France an immense territorial power, extending from the Rhine to the Strait of Gibraltar. England and Holland would be forced to bow the knee to what would become a mighty empire; and hence they supported the Archduke Charles of Austria, who was the grandson of another Spanish princess. The outcome of the rival claims was the War of the Spanish Succession. which lasted from 1702 to 1713, only sixteen months short of the reign of Queen Anne. During these years England, as a partner in the Grand Alliance, engaged in numerous battles on land and sea. Our army's share in the great struggle under the Duke of Marlborough added lustre to our fame, particularly in the great battles of Blenheim, Ramilies, Oudenarde and Malplaquet.

CHAPTER X

IN THE DAYS OF QUEEN ANNE

QUEEN ANNE was the younger daughter of James II, and nearly twenty years before she came to the throne she had married Prince George of Denmark. The Queen appointed her consort Lord High Admiral, but he did not prove a great success, and he was succeeded by the Earl of Pembroke, who held the office only until 1709, when

it again passed into the hands of commissioners.

Within but a few months of Queen Anne's succession war was declared. England sent a large army to the Continent, John Churchill by common consent taking the leadership of the allied forces. After the Treaty of Ryswick the Navy had been cut down to 8000 men, but now preparations were being made to raise it to 30,000, and ships were being fitted out to meet the altered conditions. Sir George Rooke set sail with 30 English and 20 Dutch ships-of-the-line, and transports carrying 14,000 troops under the Duke of Ormond. The destination of this expedition was Cadiz, which it was found impossible to capture owing to its strong fortifications, and for the failure the London mob denounced Rooke as an incapable coward.

A little later the English admiral made a dash upon Vigo harbour, which contained a fleet of Spanish treasure galleons in charge of 18 French ships-of-the-line and 7 frigates. Rooke found that the harbour entrance was guarded by 70 heavy guns and the inner end was protected by a strong boom. Owing to shoal water only 25 of the English and Dutch ships could attempt to reach the enemy. The Duke of Ormond effected a landing with 2500 soldiers and successfully assaulted one of the batteries. Admiral Hopson, on board the "Torbay," then led the way, and, crowding all sail, burst the boom of spars and chains, and in face of the enemy's guns led his squadron into the harbour. While the troops attacked other batteries, the English squadron opened fire on the huddled galleons and their French guardians. In the end Rooke completely mastered the place, capturing more than a dozen French warships, 7 frigates and 15 Spanish galleons; the remainder of the shipping in the harbour was totally destroyed. Rooke's spoils included specie to the value of more than £2,000,000,

which was accounted a very good set-off against the Cadiz fiasco.

For the success at Vigo Rooke had to thank his subordinates for their whole-souled co-operation and dogged determination, which was very different from the experience of Vice-Admiral Benbow in the West Indies. Benbow was given a commission as captain by



THE BATTLE OF VIGO, 22ND OCTOBER 1702

James II; in the Channel he served excellently under Sir Cloudesley Shovel and was raised to rear-admiral by William III. He was despatched with a squadron to West Indian waters, where the French had three squadrons afloat. Benbow, however capable, could not do impossibilities; and seeing that it was practically useless to attempt to attack the superior French fleet contented himself with safeguarding Jamaica, and utilising his ships to the best advantage in the protection of our commerce.

Shortly a French squadron under Admiral Ducasse was detached

from their main fleet, and Benbow espied an opportunity to cut in and spoil whatever the enemy had in view. Leaving Jamaica with seven sail, he came up with Ducasse on 19th August and promptly engaged him, but Benbow got practically no assistance



ADMIRAL BENBOW DIRECTING THE FIGHT AFTER A CHAIN-SHOT HAD SHATTERED HIS LEG

from several of his captains, who appeared to be but little eager for a fight. The next day their aloofness was more marked and only the "Ruby," 48 guns, under Captain George Walton, gave any real assistance to Benbow in the "Breda," 74 guns; while in the case of the French, Ducasse was by no means anxious for a battle, as he was hampered by having various small vessels and a body of troops in his charge. On the third day the "Breda"

and "Ruby" resumed the fray, with the result that the latter's spars were badly damaged and Benbow had to tow her out of harm's way, while the "Defiance," 64 guns, and "Windsor," though close at hand, rendered no assistance, not firing a shot. All during the next day the hostile squadrons were in any case too separated for complete action, but the two consorts stuck to the foe until the little "Ruby" received further damages and made for Port Royal.

On the fifth day the English admiral still continued the chase and cut off and captured one of Ducasse's smaller vessels. the 24th the "Falmouth," 48 gun frigate, came to assistance of the "Breda"; and Benbow continued the unequal fight with such vigour that three times in person he boarded the rearmost of the enemy's ships, receiving wounds in the face and arm. Later, during a warm engagement, a chain-shot shattered Benbow's leg. Nevertheless the gallant admiral continued to direct the fight, declaring that he would rather lose his other leg than see England dishonoured. In response to his urgent signals some of his companion ships came up, but their assistance was so perfunctory that Ducasse was able to keep on his way northward, taking his damaged vessels with him. Captain Kirby of the "Defiance" urged his admiral to relinquish the fight. To the disgust of Benbow he found most of his captains of the same opinion, and very reluctantly returned to Jamaica, leaving the French to make for Cartagena without further interference.

Ducasse sent a letter to Benbow:—"Sir,—On Monday last I had little hope but to have supped in your cabin, but it pleased God to have ordered it otherwise. I am thankful for it, but as for those cowardly captains who deserted you, hang them up, for

they well deserve it.—Ducasse."

Upon arrival at Jamaica Benbow's leg had to be amputated. The recalcitrant captains were court-martialled. Captain Hudson of the "Pendennis" died just previous to the trial, Constable of the "Windsor" was dismissed, and Kirby of the "Defiance" and Wade of the "Greenwich" were condemned to death. A minor poet of the day thus recorded the incident:—

"Brave Benbow he set sail,
For to fight, for to fight,
Brave Benbow he set sail,
With a fine and pleasant gale;
But his captains they turned tail,
In a fright, in a fright,"

The insubordination, however, was not on account of fear. More likely some of the officers secretly desired the success of the Pretender, and thus leant towards the French; or it may have been that men trained in the Navy resented the rapid rise of Benbow from the merchant service. The dogged admiral did not long

survive his injury, fever intervened and he was buried at Kingston, Jamaica.

In the year 1703 there were several skirmishes between English and French squadrons, in which we generally came off best; but on 27th July Admiral Thomas Dilkes, with 3 ships-of-the-line and 3 frigates, effected a wonderfully smart coup off Jersey, where he captured or destroyed over 40 French merchantmen, together with 3 warships that were acting as convoy. On 26th November, during a violent hurricane that swept our southern shores, no less



SIR GEORGE ROOKE
(From the Painting by Dahle)

than 13 fine warships were sunk off the Downs; in most cases all hands went down. Sir Cloudesley Shovel returning home from the Mediterranean had a narrow escape from the same fate, and only saved his ship by cutting away her masts. The great calamity put the nation into mourning and caused the appointment of a day of humiliation and general fast.

Early in 1704 the Grand Alliance arranged for the Archduke Charles of Austria to proceed to Spain, whither a fleet of English and Dutch ships under Sir George Rooke convoyed him. In July Rooke was off Gibraltar, having on

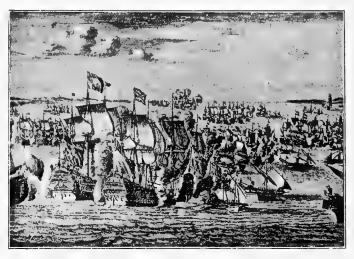
board with him a body of troops under Prince George of Hesse. Sir Cloudesley Shovel having joined him with another squadron, in view of their combined strength the two admirals perceived an opportunity to add to the renown of their country; and they decided to attack Gibraltar, which was commanded by Don Diego de Salinas for Philip V.

On the evening of the 21st the Prince George of Hesse landed nearly 2000 marines and cut off the garrison from the mainland, thus interfering with their supplies. In response to a summons to surrender, Salinas intimated his intention to die in its defence, although the garrison did not exceed 600 men, to which could be added a number of armed inhabitants; but as the Rock in itself is the strongest natural fortress in the

CAPTURE OF GIBRALTAR, 23RD OCTOBER 1704

world, it was by no means certain that an attack upon it would succeed.

Rooke commenced the bombardment of the fortress on the 23rd, and so battered the defences at the head of the Mole that Salinas was forced to retire from them, upon which Rooke ordered Captain Whittaker to land with a force to occupy that position. In the meantime, however, Captains Jumper and Hicks of the "Lennox" and "Yarmouth" landed a body of seamen in pinnaces. Scarcely had they got ashore when a mine exploded under them, killing 40 men and injuring many others. Although this was disastrous to the seamen, the succeeding confusion covered the



DEFEAT OF THE SPANIARDS OFF MALAGA

landing of Whittaker's force, which took possession of the works. All the while the ships were hammering the various defences, and the Prince of Hesse and his marines were pushing forward their advance from the isthmus. With a great portion of the Rock already passed out of his hands, the governor was prepared to capitulate, which was carried out the next day.

Upon taking possession, the standard of the Archduke Charles was run up, but Rooke had it hauled down and substituted the flag of Queen Anne. We had relinquished Tangier on the opposite side of the Straits in 1653; and the present capture was of enormous importance in later years as a watchdog on one of our most important routes for commerce. When he had seen the defences restored to something like order, Rooke installed Prince George in command of the Rock, and set out with his combined squadrons of 53 sail in the hope of falling in with the French fleet. He en-

countered Count Toulouse off Malaga with 50 ships-of-the-line and 17 frigates, the whole carrying 3700 guns and 25,000 men. An action was fought during the day in which we had nearly 700 men killed and over 2000 wounded, but neither side lost a vessel. As Toulouse retreated during the night, probably the French loss of men was more severe than our own. In any case the French fleet remained under the shelter of the guns of Toulon for the rest of the year.

In 1707 it was decided to attack Toulon, which was becoming a great French naval stronghold. The Duke of Savoy arranged for the attack by land, and Sir Cloudesley Shovel with an English

and Dutch fleet was sent to co-operate.

The Savoy forces crossed the Var, and while Sir John Norris sent boatloads of seamen to attack the French batteries, Prince Eugene, in command of the Savoyards, secured the heights that commanded the town. On the land side Toulon was protected by exceedingly strong defences, for the reduction of which the English admiral landed a large force of seamen with a hundred guns, a very real naval brigade. These preparations being completed, Toulon was soon hotly assailed by sea and land, and the King of France hurried additional troops to the scene, for in addition to the port itself, its harbour contained nearly forty ships of the line, that could render little or no assistance, while they were in imminent danger of capture.

The French reinforcements proved too strong for the Duke of Savoy, to whom the garrison in a desperate sortie did considerable damage. Recognising that he was too weak to hope for success, the Duke decided to abandon the siege. The evacuation was accomplished without great hindrance, thanks to the fleet which bombarded with vigour, while the sick and wounded, ordnance and stores were brought off from the shore. Although this great undertaking did not meet with success, the want of strength on land must be blamed and not any lack of efficiency on the part

of the fleet.

Leaving Sir Thomas Dilkes with only thirteen vessels in the Mediterranean, Sir Cloudesley Shovel set sail for England with the remainder, only to meet with disaster in the Channel, for on 23rd October, his flagship the "Association" struck on the Bishop's Rocks and all on board were lost. Two other vessels, the "Eagle," 70 guns, and the "Romsey," 50 guns, also went down; and the remaining nine had a narrow escape. Sir Cloudesley's body was recovered, and in due course was interred in Westminster Abbey, an honour that had been richly won in a period, when courage, energy, and foresight were greatly needed. The wreck of the "Association" stirred up the government to offer a reward of £20,000 for some reliable aid to determine longitude; and the French government offered 100,000 livres. Hadley's quadrant

came out in 1731, and the sextant in 1761; but as sailing masters in the Navy had to provide their own instruments there was little incentive to adopt new methods.

On the day of the disaster to Shovel's squadron, Parliament passed the Act of Union between England and Scotland. Although the crowns of the two countries had been worn by the same king, or queen, since 1603, there had been no real union between the two countries. There had been constant disputes and even fighting,



SIR CLOUDESLEY SHOVEL

and the Parliaments of the two countries had often strongly opposed each other. But now were the old feuds and animosities to be forgotten. The Kingdoms of England and Scotland were to become one kingdom, under the title of "Great Britain"; and the flags of the two countries were to be joined together. This great Act of Parliament opened up to Scotland the resources and wealth of England; and on the other hand it gave to England the courage and energy and enterprise of Scotsmen, who henceforth would go on hand in hand in that great empire pageant, whose equal the world has never seen.

Omitting references to numerous minor engagements, it may

be said that the English and Dutch at sea proved a very severe check to the ambitions of Louis XIV; and in 1713, by the Treaty of Utrecht, he yielded points that by no means accorded with his real desires. The chief terms were the acknowledgment by France of the Protestant succession in Great Britain, and the final abandonment of the Pretender, who had caused frequent trouble in Scotland and Ireland. Nova Scotia, Hudson Bay and St Christopher were confirmed to Great Britain, and Spain consented to our retention of Gibraltar and Minorca. On the other hand we agreed to recognise



GREAT SEAL OF QUEEN ANNE

Philip as King of Spain, but prohibited the union of the French

and Spanish crowns.

Queen Anne died in 1714. On account of her English birth, her attachment to the English Church, and her general goodness, the Queen was very popular. During the whole of her reign we had enjoyed the co-operation of the Dutch, or our fleet would have needed to be increased in strength. At this period we possessed 7 first-rate ships, three-deckers, carrying 100 guns, or upwards; 13 second-rates, three-deckers, of 90 guns; 42 third-rates, two-deckers, of 64 to 84 guns; 69 fourth-rates, of 50 to 60 guns; and 66 fifth and sixth-rates, mounting from 20 to 44 guns. The sailing ship now had been developed to a degree that was more or less stereotyped until the end of the eighteenth century.

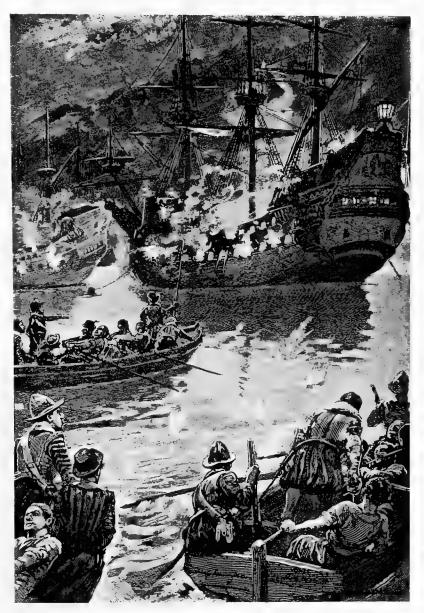
CHAPTER XI

THE WEB OF EMPIRE

GEORGE I had been king only three years when Spain endeavoured to form a league with Russia and Sweden against Great Britain, and at the same time proposed to seize Sicily with a view to the invasion of Italy, which would be a blow at our Austrian allies. War broke out between Austria and Spain, and we fitted out a fleet to assist Austria in the Mediterranean.

On 15th June 1718, Admiral Sir George Byng set sail with 20 ships-of-the-line, together with two fireships, two bomb-vessels and a hospital ship; 1380 guns and 8880 men. In the meantime the Spaniards had reduced Palermo and were besieging Messina. Near to Cape Passaro, Byng came up with a Spanish fleet of 27 sail, 1284 guns and 8800 men, so that the hostile fleets were of practically similar strength. Don Antonio de Castanieta, who was in command of the Spaniards, courted trouble by detaching a squadron for some operation on the Sicilian coast. When Byng perceived this movement, he sent Captain George Walton of the "Canterbury" with four other ships to give chase. Some warm work must have followed, for Walton, in due course, reported to his admiral: "We have taken and destroyed all the Spanish ships and vessels which were upon the coast, as per margin." Castanieta thus lost ships mounting 60, 54, 40 and 30 guns respectively, a fireship and two bomb-vessels, besides four captured. Before a shot was fired, Byng had suggested a truce with the Spaniards for two months, pending a possible peace which the diplomats of the two countries were discussing. Doubtless the Spanish commander now wished that he had treated the proposal with less haughty disdain.

By the time Walton had completed his drastic business, Byng was engaging Castanieta's main fleet, and even before the action was general, the "Santa Rosa," 64 guns, and "San Carlos," 60 guns, were captured by the "Orford," "Grafton" and "Kent." Captain Nicholas Haddock of the "Grafton" distinguished himself greatly throughout the day. After pouring destructive broadsides into the foregoing captured vessels, he closed on the "Principe de Asturias," 70 guns, which he engaged hotly for a time, and then he made sail to batter others of the enemy, leaving the "Breda" and "Captain"



DEFEAT OF THE SPANIARDS OFF CAPE PASSARO, AUGUST 1718

to deal with the "Principe de Asturias," which struck her flag to her new opponents. From that point the British success was never in doubt. The "Kent" and "Superb" engaged Castanieta's own flagship, the "St Philip," and for two hours maintained a running fight with her. Thanks to her superior sailing, the "Kent" was enabled to pass under the stern of the enemy, pouring a terribly destructive broadside into her, and with the "Superb" raking her on the opposite quarter, Castanieta surrendered his ship, which had lost 200 of her crew.

Two Spanish 60-gun ships attempted to capture Byng's flagship, the "Barfleur," but were themselves taken. In the end the Spaniards were glad to get away with 8 ships. Shortly afterwards the "St Philip" was destroyed by fire, and Castanieta, gallant but rash, died of his wounds in Sicily, where he had been landed. After this defeat the failure of the Spaniards in the island was a foregone conclusion, for the British blockaded it, and a little later the Austrians landed 10,000 troops. Spain thereupon made peace, and Byng returned home, where he was created Viscount Torrington for his services.

There was but little naval activity during the remainder of the reign, disputes with Portugal and in the Baltic being of little consequence. Within nine months after our capture of Gibraltar two desperate attempts had been made by the Spaniards to recover possession of it, and now, in October 1726, a Spanish land force commenced to besiege the garrison. But Sir John Jennings with a powerful squadron went out to guard the Rock seawards and keep the defenders supplied with reinforcements, and at the end of four months the Spaniards ceased offensive operations.

When George II ascended the throne in 1727, the Prime Minister was Sir Robert Walpole, who was strongly opposed to war, and would go to any lengths to avoid it. But war was bound to come with Spain on account of her policy of continual interference with British trading interests, not so much that she desired the commerce for herself, but that she objected to others benefiting from In the West Indies, in particular, British merchantmen were searched to prevent smuggling on the coasts of the Main, and often our crews were treated with great cruelty by the Spanish coastguard. Captain Robert Jenkins was said to have had his ear torn off by a Spanish official, who told the victim to take it home to show the King of England. Whether it is true or not, that Jenkins preserved the denuded organ in a bottle and exhibited it before a Committee of the House of Commons seven years later, there is no doubt that the incident stirred up popular indignation that was not appeased until we declared war against Spain in 1739, and the preparation of three squadrons indicated our intention to prosecute the quarrel with vigour.

Walpole's keenest critic in Parliament was Captain Edward

Vernon, who had seen some service at the beginning of the century. He was afraid that Walpole's love of peace might lead to the fleet being instructed not to take a tive measures except under dire provocation. This had been the experience of Admiral Hosier in the West Indies early in 1726. He was kept merely cruising off Porto Bello in notoriously unhealthy waters, until his officers and men were decimated by disease and himself died of fever, although his friends attributed it rather to a broken heart.

Vernon had asserted that Porto Bello could have been captured by half a dozen ships, and Walpole, chiefly perhaps to get rid of a bitter opponent in Parliament, raised Vernon to the position of admiral, and put him in command of a squadron to act against Spain in the West Indies. Vernon's ships consisted of the flagship "Burford," 70 guns, "Hampton Court," 70, "Worcester" and "Stafford," 60 each, "Norwich," 50 guns, and the frigate "Sheerness."

Sailing in July, the British squadron reached Jamaica in October, and on 5th November was ready to attack Porto Bello, which at that time ranked among the best fortified ports in the world. When one looked at the Castle de Ferro with its 78 heavy guns and a battery beneath with another 32, while on the other side of the harbour entrance was the Castle Gloria with 98 guns, it seemed as if Vernon were attempting an impossible task; and in addition there were inner forts guarding the shipping.

On 21st November 1740 Vernon commenced to bombard the Iron Castle, and his gunners made such good play that the Spaniards deserted their guns. Vernon saw his opportunity and at once landed seamen and soldiers, who speedily made their way to the lower battery, which they entered by way of the embrasures, the men clambering up each other's shoulders in order to reach them. Once inside, the landing party made short work of the inmates of the castle, from whose top the British colours were soon flying. The next morning Vernon proposed to attack Castle Gloria, but its commander preferred to capitulate, and the inner forts could only follow suit.

With Porto Bello thus at his mercy, even Vernon himself must have been intensely surprised at having been able to justify his boast in Parliament with the loss of only seventeen men killed and wounded. The best of the enemy's guns he transferred to his ships and then blew up the fortifications. Vernon secured 10,000 dollars found in the town, but would not permit plundering, greatly to the disgust of the seamen who were anxious to treat the Spanish to a few reprisals.

In the following year the British admiral received reinforcements raising him to 29 warships, with transports carrying 12,000 troops. At Cartagena, in Cuba, and in Panama, operations were conducted against the Spaniards, but in neither case with any



ADMIRAL VERNON AT CARTAGENA, MARCH 1741

success, partly because of sickness among both the naval and military forces, but still more on account of the disagreements between Vernon and General Wentworth. Upon more than one occasion victory would have been assured to us, if the admiral and general had co-operated, but they allowed spleen and personal ill-feeling to prevail in favour of the enemy; and the final outcome was the loss of some six or seven thousand men, comparatively few from injuries, disease claiming the vast proportion. Upon their return



SIR GEORGE ANSON

home there were violent recriminations between Vernon and Wentworth, and the former, committing the indiscretion of publishing official correspondence, was struck off the Navy List.

While these various operations were proceeding in the West Indies, Captain George Anson, who commanded the "Centurion," 60 guns, was making a great name in a little-known part of the world, namely, the Pacific Ocean, to which he had been despatched to strike a blow at Spain, where usually she suffered no interference. To the "Centurion" were added the "Gloucester" and "Severn," each 50 guns, "Pearl," 40, "Wager," 28, with the sloop "Trial," and a couple of victualling tenders. At the outset it was unfortunate that various changes of plan delayed Anson's start, and

thus the Spanish got wind of what was afoot in time to warn their American governors of his coming.

The ships given to Anson for what was to prove an immortal voyage round the world were for the most part unseaworthy; and the crews were not only short-handed, but consisted largely of wornout men, utterly unfit for the strenuous demands that would be made upon them. The expedition was to include a land force of 500 men, who were called up chiefly from among the out-pensioners of Chelsea Hospital; few of them were less than sixty years of age, and all were long past service in a marching regiment. Half of the men selected failed to put in an appearance, and really they did Anson good service by hiding themselves until after the vessels had sailed. Some of those who went aboard never came up on deck from below, until they were carried up dead to be committed to the sea.

The squadron sailed on 18th September 1740, and from the commencement of the voyage sickness attacked the crews, necessitating the landing of some of them on St Catherine's Island. In the neighbourhood of Cape Horn gales played havoc with sails and rigging. Next the crews suffered from scurvy, and in a period of only four weeks the flagship alone lost nearly fifty men. In the course of a particularly bad spell of weather the vessels got separated, and the "Severn" and "Pearl" returned to England; but of the "Wager" nothing was heard for a very long time. With dogged pertinacity, however, Anson kept on and reached Juan Fernandez, the island of Robinson Crusoe, where later he was joined by the "Gloucester," the "Trial," and one victualling tender.

The vessels were in a wretched condition, their crews were decreased by quite two-thirds; and the remainder were so ill and shockingly depressed, that they could scarcely work the sails. Anson made a three months' stay at Juan Fernandez, and then, with his men reinvigorated, he sailed for Peru, collecting several small prizes en route.

Anson believed the port of Payta possessed but a weak defence, and hoped to take it by surprise, so as to give the inhabitants no time to remove and secrete their valuables. Arrived within twelve miles of land, he hove to and waited for darkness. He then sent three-score men ashore in boats under Lieutenant Sir Percy Brett, who rowed close in to the fort before they were discovered and a few shots fired at them. Brett effected a landing, and by daybreak the British colours were floating above the fort, and Anson sailed into the bay. Treasure and stores to the value of many thousands of pounds were put aboard the British ships, while the Spanish shipping in the harbour was destroyed, except the "Soledad," which Anson added to his own trio and placed under Lieutenant Hughes of the "Trial." which he abandoned.



THE "CENTURION" IN A TERRIBLE STORM

Anson next made for the coast of Mexico and cruised for some months off Acapulco in the vain hope of falling in with a treasrue galleon from Manilla. In May he turned his prows westward, only to encounter bad weather, which necessitated the abandonment of the "Gloucester" and the removal of her crew to the "Centurion," which was now all that remained to Anson of the squadron with which he had set out nearly two years earlier.

Again scurvy attacked his men, and the captain nursed them on Tinian, one of the Ladrone Islands, until Anson was struck by what for a time seemed to be the crowning disaster. While he was ashore with some of his sick crew a terrible storm drove the "Centurion" out to sea. For days nothing being seen of her, Anson decided to fit out a small boat and endeavour to reach China, when to his great joy the "Centurion" returned after an absence of nearly three weeks. She was badly in need of repairs, which the captain effected to the best of his ability, and which would last until he could give her a thorough refit at Macao in Southern China, where the Portuguese had established a settlement in 1557.

In April 1743 Anson was again on the look-out for a prize, but not until June did a Spanish vessel heave in sight. She was a treasure galleon, but as she mounted 70 guns her commander was prepared to fight. For an hour and a half she returned the "Centurion's" fire and then struck her flag. Anson accounted the ninety minutes very well spent, when he found the galleon contained treasure to the value of one and a half million dollars, and the ship herself realised a good sum, when he sold her in

Macao.

By the end of the year, and forty months out, Anson's thoughts turned homewards; and on 15th May 1744 he arrived at Spithead after an absence of only four months short of four years, during which he had given an exhibition of skill, hardihood, and daring that ranks high amongst our records of brilliant achievements. Little wonder that he was received at home with joy, and there was great enthusiasm when the officers and seamen of the "Centurion" drew their haul of treasure through the city of London. The Admiralty's recognition of Anson's services was marked by his immediate promotion to the rank of rear-admiral. Not until November 1745 was the fate of the "Wager" cleared up, when only four of her crew returned to England. They had been wrecked on a desert island, and eventually reached Europe as prisoners of Spain, but the Spanish government released them and a Dutch vessel carried them home.

It was a pity that we had not a few admirals of Anson's type in the Mediterranean in the early part of 1743. France and Spain were again acting jointly against us and had a combined fleet in the Mediterranean, where we had eighteen sail-of-the-line under Admiral Matthews. On 11th February the fleets met, but owing

to Vice-Admiral Lestock falling astern with the lee division, and

not recovering in time, no decisive action was possible.

The British command was in singularly unhappy hands. An able commentator has described Matthews as being anxious to fight but not knowing how. Lestock maintained that the flagship failed to give the proper signals, but there seems no doubt that owing to antipathy towards his commander, he did not desire to render him assistance. Matthews certainly did not shine in handling his ships, of which only two did anything to distinguish themselves, one being the "Marlborough," under Captain Cornwall,

shot off, and the other the "Berwick," under Captain Hawke, who captured a ship of sixty guns. As a result of this indecisive and inglorious battle Matthews and Lestock were court-martialled, the former being cashiered and the latter acquitted. In the opinion of many the sentences should have been reversed, for whatever the shortcomings of Matthews, he was not wilfully assisting the enemy, which was what Lestock's offence amounted to in

who had both legs

The year 1744 was bare of any naval engagement of importance, although Great Britain and France again were openly at war, but on the night of 4th October our fleet experienced an unexpected blow. Sir John Balchen, in the

venting his ill-will during an engagement.

"Victory," was returning home with a squadron from the Tagus when the ships were struck by a terrific storm off the Casquet Rocks. Some of them only managed to weather the gale by heaving their guns overboard, but the flagship went down with the admiral and a crew of more than a thousand men. The "Victory" was a first-rate of 100 guns, launched at Portsmouth, in 1737. She was 174\frac{3}{4} feet long, 50\frac{1}{2} feet beam, and 20\frac{1}{2} feet deep; tonnage 1920; and in her building and equipment she was the finest ship in the world.

Upon several occasions, notably in 1708 and 1715, the "Old Pretender" (James Edward, son of James II), with the assistance of France, had landed in Scotland or Ireland in attempts to recover the crown of his Stuart ancestors; and in 1745 the "Young

Pretender "(Charles Edward, grandson of James II) left France on board the frigate "La Doutelle," accompanied by the "Elizabeth," 64 guns, bound for Scotland in the hope of setting up a rebellion. Captain Brett on the "Lion," 58 guns, was formerly a lieutenant on the "Wager," one of Anson's unfortunate squadron. The "Lion" fell in with the "La Doutelle," and a sanguinary fight ensued; but Brett allowed the frigate to escape, not knowing that she carried any particularly distinguished person. Next, the "Lion" attacked the "Elizabeth," opening fire on her within pistol-shot range. The French ship suffered severe damages, some of her ports being knocked into one; but she contrived to escape on account of the "Lion" having lost her mizen-mast, while her rigging was badly cut up. Captain Brett and 53 men were killed and 100 wounded; on the "Elizabeth" 64 were killed and 140 wounded.

Meanwhile the struggle between Great Britain and France was shifting largely from Europe to America and India, where the rivalries of the two countries would give rise to some of the most

stirring incidents in British history.

For a moment we may review the position in India, even at the risk of the repetition of a few stray facts. Vasco de Gama reached India by sea in 1498, and by the end of the next century Spain and Portugal were sharing the wealth of the East Indies between them. Our first trading factory was established at Surat in 1612, but it was a considerable time before we had a sure footing except at Madras, Bombay, and Calcutta. Charles II sold Bombay to the East India Company for £10 per annum, whereas it was worth more than any of the bribes with which Louis XIV tempted him. When our East India Company began to thrive by leaps and bounds it found itself opposed on every hand by the Portuguese, Dutch, and French, and the last-named had now determined to secure the whole of India for themselves.

When war broke out we made little naval show in eastern waters, and even when the East India Company asked for assistance only four more ships were sent out. On 25th January 1746, Commodore Barnet on the "Deptford," 60 guns, and Lord Northesk on the "Preston," 50 guns, captured five French 30-gun ships with valuable cargoes off the eastern coast of Sumatra. This was our first naval action with the French in the East Indies. Proceeding to the relief of Madras, which was being menaced by the French admiral, La Bourdonnaire, Barnet unfortunately died, and was succeeded by Captain Peyton. The rival squadrons met and engaged in June 1746, without any definite result; but three months later La Bourdonnaire appeared off Madras, which he took without difficulty. This incident aroused Great Britain to the imminent danger in India, and Admiral Boscawen took out a squadron. On his way he intended to attack the island of Mauritius, but found

that its strong defences would delay his prime mission. La Bourdonnaire was the French governor of Mauritius, and he had seen to it that the island's fortifications were in order before he went on his expedition to the Bay of Bengal.

It was at the end of July 1748 when Boscawen arrived at Fort



ADMIRAL BOSCAWEN

St David, near Madras. He landed his small army and at once marched on Pondicherry, the principal French settlement. For six weeks he laid siege to it without success, and then, the rainy season being at hand, he returned to Fort St David to await an opportunity to recapture Madras.

Nearer home the progress of the war had been more eventful. The French were determined to strengthen their forces in America and Asia, and were fitting out squadrons, one to oust us from Louisburg in Cape Breton and the other to strengthen the

attack upon India. With 15 men-of-war mounting 922 guns, Vice-Admiral Anson, on the "Prince George," 90 guns, set sail from Plymouth on 9th April 1747; Rear-Admiral Warren on the "Devonshire," 66 guns, was second in command; and among the other vessels was the "Centurion," in which Anson made his memorable voyage. The French fleet of 38 men-of-war and armed merchantmen was engaged off Cape Finisterre on 3rd May. After an action of two and a half hours 6 of the French sail-of-the-line and 4 armed merchantmen struck their colours, among the prisoners being two admirals. For this victory Vice-Admiral Anson was created a peer and Warren was awarded the Order of the Bath.

About six weeks later Commodore Fox was off Cape Ortegal with half-a-dozen large ships, when he fell in with 170 French merchantmen from the West Indies being convoyed by 4 ships of war. He promptly attacked, and captured nearly 50 of the

merchantmen.

In August a large number of French merchantmen were in the Basque Roads preparing to set sail, in charge of line-of-battle ships. Rear-Admiral Hawke sailed from Plymouth in command of 14 vessels to attempt the destruction or capture of the merchantmen; his largest vessels were the "Edinburgh," 70 guns, and his flagship, the "Devonshire," 66 guns. On 14th August he met and engaged the enemy off Cape Finisterre. The French commander, M. de l'Etendeur, had only 8 line-of-battle ships, but they were larger and carried more guns than the British. Sending his transports to windward under the charge of the 64-gun "Content," the French admiral awaited the British attack. Hawke set the "Lion" and "Princess Louisa," both of 60 guns, to lead the pursuit, and they ran the gauntlet of the fire of the French squadron, until other ships came up and the action became general.

The French flagship, the "Tonnant," 80 guns, and the "Intrépide," 74, were overpowering our "Eagle," 60, Captain George Rodney, and the "Edinburgh," 70 guns, when to their assistance came the "Devonshire," to which the "Severn" of 56 guns had just surrendered. The "Eagle," however, having had her wheel shot away, was unmanageable and fell on board the "Devonshire," rendering both vessels practically helpless. At this critical juncture, too, the lower-deck gun breechings of the "Devonshire" were carried away, which gave the "Tonnant" an excellent chance of subjecting the British flagship to a hot fire, until the "Tilbury," 60 guns, sailed in between the two vessels and gave Hawke breathing space to make use of spare breechings. Shortly the "Devonshire" re-entered the action and she captured the "Trident," 64 guns, and "Terrible," 70, in quick succession. The Neptune, 70, was dismasted, her captain killed and 200 men killed and wounded, before she struck to the "Yarmouth." When the "Monarque, 74 guns, and "Fougueux," 64, struck at 5 p.m., there remained of

the French squadron only the "Tonnant" and "Intrépide," which then sought to escape. The "Nottingham," "Eagle," and "Yarmouth" gave chase, which was discontinued when Captain Saumarez of the first-named fell mortally wounded. M. de l'Etendeur lost six ships and his casualties numbered over 800; but thanks to his gallant fight and darkness coming on, he saved



LORD HAWKE
(After the Painting by Francis Cotes, R.A.)

every vessel in the convoy. Our losses in this brilliant action were

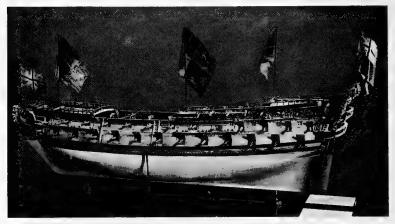
150 killed and 560 wounded.

The war came to an end with the Treaty of Aix-la-Chapelle, 18th October 1748. Its chief terms were concerned with the restoration of conquests, by which Madras was evacuated by the French and we yielded up Cape Breton, which we had captured in 1745. The Treaty was only a truce, largely due to the exhaustion of the combatants, and really it did nothing to settle the acute points at issue between the rival colonists in America and the

contending empire-builders in India. In 1754 war broke out between the British and French settlers in America, and in May

1756 Great Britain again declared war against France.

Let us glance at the situation in North America. We had established ourselves in Virginia, and later, the Pilgrim Fathers had extended our holding. South of these settlements the French were possessed of Louisiana, and in the north they had established the city and province of Quebec. For a long period there had been constant quarrels between the settlers; and now the French had built a series of forts extending from Louisiana to the Canadian lakes, which were preventing the British from trading with the West.



'THE DREADNOUGHT," 1748 (From a Model in the Museum of the Royal United Service Institute)

With the outbreak of fresh hostilities between Great Britain and France in 1756, the latter at once seized Minorca, for the few ships we had on the station could make no attempt to prevent it. Vice-Admiral the Hon. George Byng was given the command of ten ships with a force of troops to relieve Lord Blakeney, who still held out in the castle of St Philip in the island in the face of a close siege. Byng had not yet specially distinguished himself, but being the fourth son of Lord Torrington, he came of a good fighting stock. Byng arrived off Minorca and encountered a French squadron under M. de la Galissonière, whom it was necessary for him to defeat before he could land troops to aid Lord Blakeney. The British commander gave the signal to engage, and Rear Admiral West at once vigorously attacked with his division. Byng, thinking too much of the formation of his line, failed to get into action with sufficient promptitude, and thus the engagement ended indecisively. Admiral West's division had borne the burden of the fight, and three of his ships were badly damaged. We also lost about 50 men killed and 170 wounded. Byng's flagship, the "Ramillies," was undamaged and her crew was intact.

On the next morning, although the enemy was not in sight,



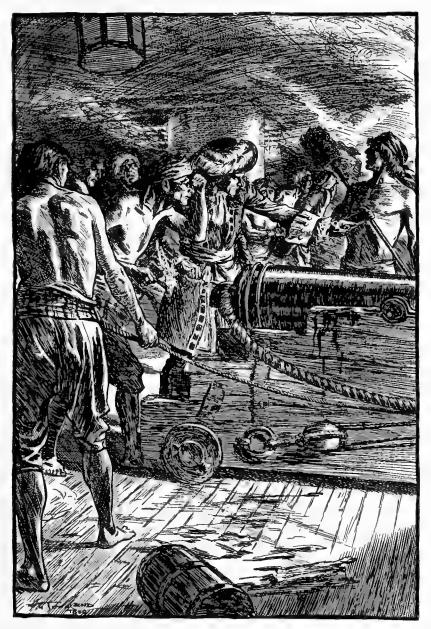
THE DEATH OF VICE-ADMIRAL THE HON. GEORGE BYNG

Byng called a council of war, and decided to leave Minorca and proceed to Gibraltar to prevent any demonstration against that fortress. Lord Blakeney, thus deserted by the fleet, could hold out little longer than another week and then had no course left but to surrender.

In England the failure of the expedition aroused fierce anger against Byng, who was relieved of his command by Sir Edward Hawke, and was then tried by court-martial, and shot by a file of marines on board the "Monarch." The sentence was a harsh one, for the admiral was acquitted of cowardice. What he had failed to grasp was, that it had become to be viewed as a crime for a British admiral to allow a hostile fleet to go at large while his own ships were practically intact. Doubtless he remembered the case of Admiral Matthews, who was cashiered for an error in tactics for which even hard fighting was insufficient atonement. Byng had no hard fighting to plead for him, but all the same he would not have suffered death had it not been felt necessary to make a sacrifice to the clamouring multitude.

Notwithstanding the peace of 1748 the struggle between the British and French still continued in India. Dupleix, the French governor of Pondicherry, made friends with various native princes, with whose aid he hoped to drive the British out of the country. In 1751 Dupleix captured Fort St George at Madras and marched the officials and servants of the East India Company to Pondicherry. Robert Clive, a clerk in the employ of the Company, stepped into the breach and worked a revolution in the fortunes of the British. But in June 1756 the Nabob of Bengal captured Calcutta and imprisoned English captives in the famous "Black Hole," where 120 of the unhappy beings died from suffocation during the night. The news of this awful atrocity did not reach Madras until seven weeks later. When Clive had collected a force of the Company's troops Admiral Watson took them on board on 16th October for conveyance to the mouth of the Hooghly. Owing to bad weather they did not arrive until December. Watson with great skill worked his heavy ships up through the shoals of the Hooghly and anchored near Budge-Budge, a native fort, upon which Watson's guns opened fire and caused some damage.

Clive and his force were landed in preparation for an attack at daybreak. But during the middle of the night a half-drunken seaman, named Strachan, clambered up the breach which the guns had made in a wall. Finding only a few natives on a platform at the top, Strachan fired his pistol at them and shouted out, "This place is mine." In a few moments several of the seaman's messmates followed him, and the racket they caused drew the attention of Clive's soldiers, a score of whom swarmed up the breach, as the garrison fled at the opposite gate. Strachan, indeed, had captured Budge-Budge. The next morning, instead of an attack upon the enemy as arranged, Watson could only hold an inquiry into the circumstances of our unexpected success. Strachan acknowledged his unconscious heroism: "It was I who took the fort, sir, but I hope there was no harm in it." Watson, although a strict disciplinarian, was greatly amused by the man's remark, but, nevertheless. he reprimanded the seaman for his drunkenness and absence from the ship. When Strachan returned to his mates, after his inter-



LIEUTENANT BRERETON HAMMERED BACK AT THE ENEMY WITHOUT CEASING

view with the admiral, he declared that, "if he were flogged for taking that fort, he would never take another." Shortly afterwards Clive recaptured Calcutta, and would have followed up his success by trouncing the Nabob, but that the Government of Madras allowed the villain to make peace.

Admiral Watson and Clive, in March 1757, decided to capture the French settlement of Chandernagore, 50 miles above Calcutta. The French certainly never dreamt of a naval assault, deeming it impossible to get big ships up the river, 130 miles from the sea. Rear-Admiral Pocock, who had joined Watson, gave the scheme his blessing, and forthwith they set about their task. Two vessels were employed, the "Kent," 64, and the "Tiger," 60, which the admirals worked up to the town. While the ships directed a heavy fire from the water upon the strong fortifications, Clive's troops attacked on the land side; and within three hours the governor was displaying a white flag in token of capitulation.

The "Kent," being badly situated, suffered the fire from two of the bastions. She was struck by about 140 balls, and six of her guns were dismounted. At one time matters looked very grave, for a 32-pounder cartridge exploded and set fire to the loose gear, which endangered the magazine. Lieutenant Brereton, fighting on the lower tier, stuck to his task with grim determination; he subdued the flames and hammered back at the enemy without ceasing. Our losses were about a score killed and fifty wounded. One cannon ball dangerously wounded Captain Speke, and at the same time took off the leg of his son, a youth of eighteen, who died a few days later.

The fall of Chandernagore was a severe shock to the French, which was driven home still further on 23rd June, when at Plassy, Clive, with his army of 3000 men, smashed up the Nabob's 60,000, stiffened with French troops and the guns served by French artillerymen. By this great victory Clive added the province

of Bengal to our Empire.

Admiral Watson died of fever and Pocock succeeded to the command as vice-admiral. France was bent upon reasserting herself, and sent out D'Ache with II sail-of-the-line and 2 frigates, having on board an army of 3000 men under Count Lally. Pocock first encountered and engaged the enemy in April 1758, but without much damage on either side. On two other occasions he entered into battle with D'Ache, and he quite disconcerted the French naval plans, even if he never scored a decisive victory, Lally laid siege to Madras for two months, but Pocock relieved it in February 1759; and when in 1760 we invested Pondicherry by land and sea, with Lally's surrender ended all hopes of France raising up an empire in India.

A few naval events of 1757 elsewhere than in Asia may receive only brief attention. Sir Edward Hawke took charge of an expe-

ENGAGEMENT BETWEEN THE BRITISH AND FRENCH OFF PONDICHERRY, 1758

dition to Rochelle, but owing to the mismanagement of Sir John Mordaunt, in command of the land forces, the result was utter failure. In the West Indies on 21st October a squadron of 7 French menof-war was routed by Captain Forrest with only three 60-gun ships. In this action mention is made of Captain Suckling, who taught his nephew, Horatio Nelson, the elements of his profession, and who on the forty-eighth anniversary of this West Indian fight laid down his life in winning the most glorious of our naval victories.

In June 1758 Admiral Boscawen, with a large squadron, and 12,000 troops under General Amherst, sailed to the harbour of Louisburg, in Cape Breton Island. Boscawen had made a great reputation as a desperate fighter. He was known in the fleet as "Old Dreadnought," from an incident that occurred when he was in command of the vessel of that name. She was a fine 60-gun two-decker that became a terror to French privateers. One night Boscawen was aroused from sleep by the officer on watch, who reported that two big ships were bearing down on them. The "Dreadnought's" captain tumbled out of his cot and ran up on deck in his night attire; and speedily decided that the two ships were French 74's. "What are we to do, sir?" inquired the young officer, not without signs of perturbation. "Do?" exclaimed Boscawen, "curse 'em, fight 'em." The captain's answer mightily amused the crew, and his men entered into the fray with a zest that made the Frenchmen rue the meeting.

Louisburg was strongly fortified and defended by a garrison of over 3000 men, to which were added armed citizens and a number of Indians. Two hundred and forty cannon were mounted on the walls of the fortifications, and in the harbour were a dozen warships manned by 3000 men. Boscawen smashed up the ships in the harbour, which was a good send-off for Amherst's desperate attack upon the fortifications. Shortly Louisburg was captured, which led to the surrender of the island a month later. Foremost in the fierce assaults upon the fortifications was Colonel Wolfe, upon whom speedily fell the choice to lead in the almost forlorn

hope of capturing Quebec, the capital of Canada.

Louis XV had inherited his father's ambition to invade England, and at various ports in the north of France were collected flat-bottomed troop transport boats in readiness for whenever occasion would serve. The British Government had no intention to allow these preparations to go on undisturbed, and expeditions were launched against various French dockyards and arsenals, in which efforts our Navy uniformly did well; but in some cases the military contingents in support were in incompetent hands, and there was failure to take full advantage of the work of the seamen. At St Malo we destroyed fourteen ships of war and a vast quantity of stores; and Cherbourg was captured, its naval and military works destroyed and a contribution levied.

In the following year (1759) we made three notable attacks against the plans for our invasion. In July Rear-Admiral Rodney played mischief with Havre, his squadron practically destroying the arsenal, while he burnt a great number of transports. The harassing of her coast caused the French to decide to send a squadron of twelve ships from Toulon under Admiral de la Clue to join hands with the fleet at Brest under Admiral Conflans; and when that was effected they would sweep the Channel clear, and so be enabled to land 50,000 troops in England and 12,000 troops in Scotland.

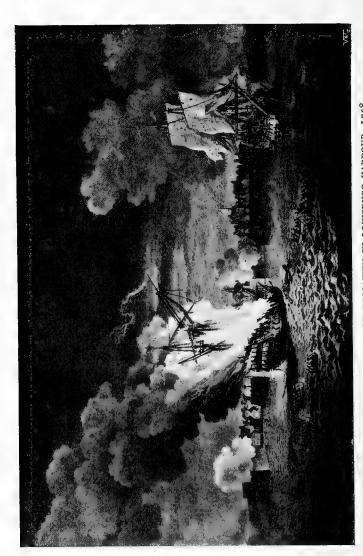
The Toulon squadron consisted of the flagship "Ocean," 80 guns; five 74's, four 64's, two 50's, and three frigates. Admiral Boscawen, back from his Louisburg success, proceeded to the Mediterranean to prevent De la Clue from bringing his squadron into the Channel. The British squadron consisted of the flagship, "Namur," 90 guns; the "Prince," 90, with Vice-Admiral Broderick; "Newark," 80; "Culloden" and "Warspite," 74's; "Conqueror" and "Swiftsure," 70's; "Edgar" and "St Albans," 64's; "America," "Intrepid," "Jersey," and "Princess Royal," 60's; "Guernsey" and "Portland," 50's; with frigates, sloops, and fireships.

While Boscawen had put in to Gibraltar to refit, the French admiral gave him the slip, and on 17th August the British squadron set out in pursuit. The next day Boscawen was in touch with the fugitives, some of whom during the night had straggled from the main body. The "Culloden" was in our van and engaged the rear French ship, the "Centaur." The British and French flagships engaged until the "Namur's" mizen-mast was shot away, which gave M. de la Clue a chance to get clear. The "Centaur" lost her captain and about 200 men before she struck her colours.

Boscawen changed into the "Newark" and was in chase all night; but at daylight off Lagos only four of the enemy were in sight. The French admiral ran the "Ocean" aground on the Portuguese coast, and escaped to the shore with some of his crew; he had, however, been wounded and shortly died. The British destroyed the "Ocean" and a 74, and captured a couple of 64's. Our loss was 58 killed and 199 wounded.

For the sake of chronological continuity we must leave Europe for America. The siege and capture of Quebec form a most memorable episode in our naval and military annals. General Wolfe's final brilliant feat and pathetic death in the moment of victory, in the popular mind have overshadowed the very important part which the Navy played in the St Lawrence.

The great expedition under General Wolfe and Admiral Saunders called at Louisburg to pick up additional ships and soldiers, and then proceeded to the St Lawrence, where about 9000 troops were landed on Orleans Island, a few miles above Quebec, but within sight of it. Perched high up on a commanding rock it was well



A FRENCH SHIP BLOWN UP BY BOSCAWEN IN LOUISBURG HARBOUR, 1758

named the "Gibraltar of the West," for in addition to its natural advantages, its heights were lined with guns, along the river earthworks were thrown up covering still more artillery, and in the river itself were gunboats, floating batteries, and fireships galore.

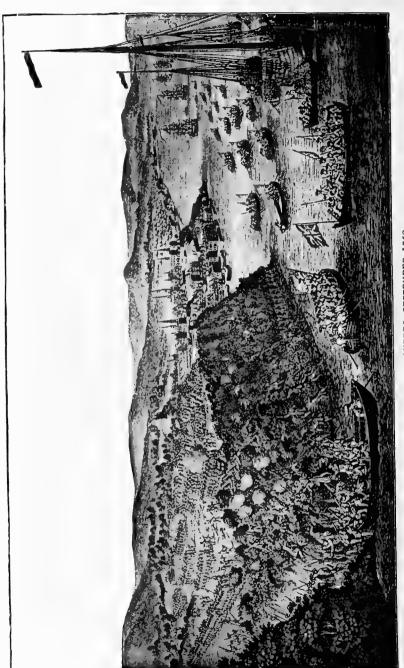
The French had no intention of sitting down to await events, and almost within forty-eight hours, about midnight, they attempted to "warm up" the crowd of British craft. The operation was entrusted to an officer named Delouche, whose eagerness led him to fire his combustible old hulks too soon. This gave the British tars sufficient time to deal with the floating furnaces before they could work the intended confusion and destruction. Our sailors leapt into boats to meet the blazing fireships and by means of ropes and hooks guided them aground, for the French effort to burn itself out and blow itself up without damaging a British spar.

In due course Wolfe made an abortive attack on the left bank of the river just below Quebec, the "Centurion" and a couple of gunboats meanwhile blazing away at the French defences. At low tide they were left high and dry in the mud and were hotly engaged until high tide refloated them. On the night of 12th September 1759, Admiral Saunders drew his ships close in to the Beauport shore opposite Montcalm's main camp, and opened fire about one o'clock in the morning. This exhibition of naval fireworks distracted the attention of the French general, while in the darkness Wolfe led a couple of hundred men up the face of the cliff to gain the heights of Abraham. From that point the battle of Quebec is an ofttold tale. Admiral Saunders' flagship was the "Neptune." Some of her seamen formed part of a naval brigade that landed and hauled artillery into position. They fell into line to watch the battle, but Wolfe sent them away. Some of the tars could not resist a fight, and managing to obtain a few stray muskets, they did their "little bit" in the good cause. Wolfe's victory inclosed three and a half million square miles within Mother Empire's bosom and he laid down his life in the doing of it.

The French could not by any means persuade themselves that fortune was smiling on them in the grim struggle. In three successive months they had been struck blows from which they reeled; and now Admiral Hawke was to secure a victory at sea that would reduce still further the power of France. The Toulon squadron had been accounted for off Lagos in August, but the one in Brest under M. Conflans was still intact, although locked up in port. A gale early in November drove Hawke into Torbay and before he could return to the French coast Conflans had set sail southwards. Hawke with 23 sail-of-the-line gave chase, and on the 20th came up with the enemy to cut him off from the open sea, which caused Conflans to make for Quiberon Bay, full of dangerous shoals, among

which he hoped the British ships would not venture.

But Hawke had been seeking his opportunity too long to give

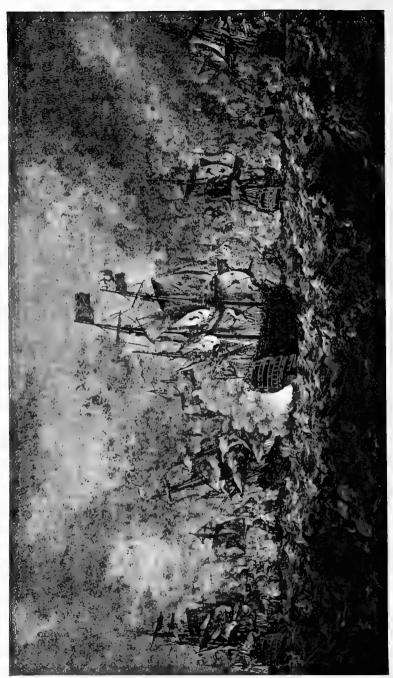


THE CAPTURE OF QUEBEC, SEPTEMBER 1759 (Frcm a contemporary print)

the French another chance of escape. Even as Conflans gained the bay the British were attacking his rear ships, one of which was swamped and sunk owing to the opening of her lower deck ports while returning a heavier fire. The battle becoming general, the "Héros" and "Formidable" struck their colours. Darkness then came on and Hawke anchored off the island of Dumet, well satisfied with his excellent beginning. Morning light revealed the "Soleil Royal," Conflan's dismasted flaghip, quite close at hand, and upon being attacked, her commander ran her aground. Seven French ships were lightened by their commanders in order to get into the small river Vilaine, where they ascended out of reach—and remained there for nearly two years. Eventually only a few of Conflan's twenty-one ships got away, leaving no shadow of doubt concerning the decisiveness of the victory of Hawke, whose seamanship and daring were beyond all praise, causing him to rank among the best admirals of the century. The result of the battle in Quiberon Bay was to cripple the French Navy for a considerable time, for during the year they had lost no less than thirty-one ships-of-the-line. Their privateers, however, were very successful, and in a period of five years, ending 1761, they despoiled us of quite 3300 merchantmen.

Admiral Hawke's flagship was the "Royal George," which, after the "Victory," was the most famous ship of the eighteenth century. In those days shipbuilding was not generally a very hurried operation and three years was no uncommon time to be occupied in building a first-rate, but the "Royal George" was not launched until ten years after laying her keel. We knew from ships that we captured, that British ships, in many respects, were inferior to those of France and Spain. Our ships, for example, were excessively long in proportion to breadth; and consequently they pitched so badly in a head sea that they almost knocked their masts out of themselves. In the "Royal George" this was remedied, and altogether she was supposed to contain every good point that we had learnt from our rivals; making her not only the most beautiful ship afloat, but an example of naval architecture that no other nation could excel. Her keel was 1431 feet long; length of gun deck 178 ft.; beam nearly 52 ft.; depth 21½ ft.; 2047 tons. She was pierced for 100 guns. She proved to be a remarkably good sailer, although she was rather short and high. The "Royal George" was notable in carrying the highest masts in any Englishbuilt ship in the British Navy, and her canvas was the squarest, just as her metal was the heaviest, namely, 52, 40, and 28-pounders. The ship's figure-head was two horses, one on each side of the bowsprit. They were both in a rearing position, and as they were painted white, the decoration stood out boldly.

After the disasters to his Brest and Toulon squadrons, followed by the blockading of his ports, possibly Louis XV grasped the true inwardness of that great naval lesson, namely that to make an



THE DEFEAT OF THE FRENCH FLEET IN QUIBERON BAY, NOVEMBER 1759 (Reduced Engraving after the Painting by R Paton)

invasion possible, supremacy of the sea must first be obtained. Within twelve months we had captured from the French quite 30 ships-of-the-line and an equal number of frigates, which we put into our own service. We had won vast territories in India and America: Hawke in the Channel, Boscawen in the Mediterranean, Pocock in the Indian Ocean and Saunders in American waters were flying our triumphant flag, for Great Britain was mistress of the sea.

When George III succeeded his grandfather in October 1760, we were glorying in successes in many parts of the world; but our enemies were pertinacious and continued the fray in the hope that the scale might yet turn in their favour. In 1761 Spain threw in her lot with France, but her assistance proved to have come too late. The alliance added 50 or 60 sail-of-the-line to the fleet of France, but even then our ships outnumbered those of the allies; and they were well-manned by officers and men who had seen much service, and with the memory of many victories to hearten them in future contests.

Our next important move was an expedition against the French possessions in the West Indies, especially Martinique, their chief stronghold. On 18th October 1761 Rear-Admiral Rodney, flagship "Marlborough," 74 guns, sailed with a squadron for Barbadoes, where he was joined by Commodore Barton and General Monckton with troops from Canada. The fleet arrived in Martinique waters in the first week of 1762, and troops were landed to lay siege to Fort Royal, which capitulated early in February; and in due course other minor French possessions passed into our hands.

We then took up the gauntlet with Spain; and in March 1762 Admiral Pocock sailed for the West Indies with a small squadron and 4000 troops under the Earl of Albemarle. Calling at Martinique, previously taken by Rodney, ships and troops were added to the expedition, raising it to 19 ships-of-the-line, with a number of frigates and sloops, and a total land force exceeding 10,000 men.

Pocock sailed for Havana, the capital of Cuba, where he arrived on 6th June. The harbour is approached by a channel less than a quarter mile wide, at the eastern entrance to which was Morro Castle, a most formidable defence. Inside the harbour were twelve Spanish sail-of-the-line and a crowd of merchantmen. The situation lay in a nutshell—the safety of the harbour and its contents, and the town beyond, depended upon the castle.

A portion of the British squadron made a display against the western side of the Morro, which was purely a feint, the troops being landed next day some six miles eastward of the castle, the transference of the land force being covered by a detachment of ships under Commodore Keppel, second in command. The troops secured a position from which they could bombard the Morro. In



THE CAPTURE OF MORRO CASTLE, HAVANA, JULY 1762

addition to soldiers there were about a thousand seamen and

marines engaged.

The siege commenced on June 20th and continued until July 1st, when a desperate attack was made by sea and land. Don Louis de Velasco, the governor, replied with great vigour, and in particular the Morro guns did much damage to the "Cambridge" and the "Dragon." The British stuck doggedly to their task until 30th July, when a breach in the walls was effected and the castle carried by assault. Although there were inner strong defences, the governor recognised the hopelessness of long withstanding further attack, and accordingly surrendered to us both town and shipping, the latter having treasure and merchandise aboard to the value of two millions sterling.

In the same month that Havana fell, Admiral Cornish, commanding in the East Indies, left Madras with a squadron of 11 ships and a land force under General Draper, bound for Manilla, the capital of the Philippine Islands. The fleet arrived in Manilla Bay on 23rd September, Cornish dropping anchor off Cavité, 12 miles from the capital, and where there was a naval arsenal defended by a strong fort. Careful review of the situation shewed that the capital itself was weak on the south side and the British leaders decided to attack Manilla direct, and the next evening the army

was landed less than two miles from the city walls.

The disembarkation of the troops was superintended by Flag-Captain Richard Kempenfelt, and it was no easy operation in monsoon weather and under the fire of the enemy. General Draper speedily got to work, throwing up defences, and opening fire on the enemy's forts at the end of a week. One day's vigorous cannonading was sufficient to prepare the way for an assault the next day. After an hour's fighting, our troops and seamen secured the bastions and impressed upon the Spanish governor the advisability of capitulation, by the terms of which the whole of the Philippines passed under our dominion.

In all our wars, whether with the French, Spaniards or Dutch, there were always numerous minor engagements, often between single ships, in which were exhibited brilliant seamanship and the most dogged courage, not infrequently resulting in frightful carnage. In many of these encounters British gunners testified to their quite extraordinary skill; for example, in a duel between our "Bellona," 74 guns, and the "Courageux," the Frenchman surrendered with 200 men killed and 110 wounded—and all within forty minutes.

Sometimes our seamen's prize money was some atonement for a life of great hardship, but few crews met with the good fortune that befell those of the two frigates "Actæon" and "Favourite," that happened to capture a particularly rich Spanish galleon. The share of the two captains was £65,000 each; lieutenants, £13,000; warrant officers, £4300; petty officers, £1800; and the seamen

£480 apiece; grand total over half a million sterling. Many of the untutored sailors got rid of their unexpected wealth in most extravagant ways, one of the least open to criticism being the adoption of a gold-laced hat as a necessary part of every sailor's "rig."

France and Spain, meeting with almost uniform failure, were anxious for peace, and in the closing weeks of 1762 agreed upon terms which were signed by Great Britain France, and Spain, at Paris on 10th February 1763. Unfortunately for us William Pitt had resigned the office of Prime Minister in 1761 on the refusal of his colleagues to declare war against Spain, although they did it a year later. Had Pitt been in power we might have secured those more favourable conditions which our marked successes fairly warranted.

By the Treaty of Paris it was agreed that we should retain Minorca, but restore Belleisle to France, which we had taken in 1761. The French concessions to us across the Atlantic included Canada, Nova Scotia and Cape Breton Island; Grenada, St Vincent, Dominica and Tobago in West Indies; while Spain ceded to us Florida. To France we granted the islands of St Pierre and Miquelon and fishing rights off the coast of Newfoundland; in the West Indies we restored Martinique and Guadeloupe; but France was to abandon the territory in America west of the Mississipi, i.e. Louisiana; and in India she was awarded the towns she held in 1794, but only as factories, not as forts. To Spain we restored Cuba and the Philippines.

However much we might be dissatisfied, we had enforced recognition of our supremacy in India and Canada and had demonstrated our ascendancy at sea. The British Empire at least was an accomplished fact, although there was yet much more to add ito it, and much blood and treasure to be expended in the keeping of it.

At this time our Navy not only possessed numerous able commanders afloat, but for the greater part of the period 1751-62 Lord Anson was the First Lord of the Admiralty; and he, out of the fullness of his practical knowledge, increased our strength in ships and men, and introduced valuable reforms in furtherance of the vigorous naval policy of William Pitt. Admiral Boscawen, who attained flag rank before he was forty, might have carried on Anson's good work, only that he died at the early age of fifty. Sir Edward Hawke became First Lord in 1766, and carried out his duties with all the single-hearted thoroughness that had marked his work at sea. He was raised to the peerage in 1776, but died five years later.

CHAPTER XII

GREAT BRITAIN AT BAY

WITH the prospect of our country now enjoying a well-earned repose, there was the opportunity to do a little empire-building without the fierce contentions that had marked most of our territorial acquisitions. There still remained many regions in the globe to which Europeans had barely penetrated, and many others of which we knew little more than their mere existence. The stress and turmoil of conflict did not encourage distant voyages of a purely speculative nature; but now adventurous explorers had come into their own again, and the world was wide and mutely calling.

In 1764 Commodore Byron, who had accompanied Anson in his famous voyage, set out to examine the coast of South America and a portion of the Pacific Ocean. In 1766 Captains Wallis and Carteret also went to the Pacific, where the former reached Tahiti,

and the latter discovered Pitcairn Island.

Of all the world's famous explorers the name of none is better known than that of Captain Cook. As a boy, he was engaged in the coal-carrying trade from Whitby, from which he drifted into the naval service. He was an able seaman aboard the "Eagle," one of Boscawen's fleet, at the capture of Louisburg. Later he was on the "Mercury" in the St Lawrence before Quebec. During the operations he engaged in taking soundings in the river by stealth at night for the preparation of a chart, that was of great service to Admiral Saunders in moving his ships from one point to another. After the war in Canada James Cook, in command of a schooner, surveyed the coasts of Newfoundland and Labrador, and gave further proof that his tastes lay in geographical and scientific research more than in fighting.

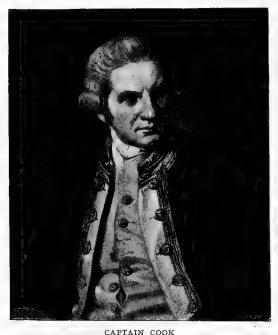
It was the foregoing excellent record that secured for Cook the command of the expedition, which King George III. equipped for the Royal Society, in order that a scientific party could observe the transit of Venus from some point in the southern hemisphere. The "Endeavour" left Deptford on 26th August 1768, having

aboard a crew of 85 and a few noted scientists.

Lieutenant James Cook sailed across the Atlantic to Rio de

Janeiro, and in due course beat round Cape Horn into the Pacific; and on 10th April 1769 reached Otaheiti, where the astronomical observations were taken with complete success. The "Endeavour" resumed the voyage in July and eventually Cook sighted New Zealand, which Tasman, a Dutchman, had discovered in 1642; but as Holland had made no claim to the islands Cook hoisted the British flag on Queen Charlotte Sound in North Island.

The Dutch discovered Australia early in the seventeenth century



(From the original Portrait by Dance in the Gallery of Greenwich Hospital)

and named it New Holland; Dampier had called there in 1688, but had not satisfied himself whether it was "an island or a main continent." Anyhow it was to remain a no-man's-land no longer, for Cook sighted it three weeks after leaving New Zealand; and skirted the coast from Botany Bay to Possession Island in the extreme north of the continent, of which he took possession in the name of George III.

Going on to Batavia, the "Endeavour" would have been refitted there, but that the climate played havoc with her crew; and scurvy raged aboard as the vessel made her way to the Cape of Good Hope, until there was scarcely sufficient men left to make or

set the sails; but at last the "Endeavour" came to anchor in the Downs on 12th June 1771, after an absence from England of two years and eleven months. Cook had sailed round the world, the tenth Englishman to do it. He had added a whole continent to the Empire, and no bloodshed in the operation. He had nobly proved that, "Peace hath her victories no less renowned than War."

The following year Captain Cook, in the "Resolution," and Captain Furneaux, in the "Adventure," set out on another voyage, chiefly to ascertain whether a great southern continent stretched from the South Atlantic to the South Pole, which was a common belief of ancient mariners, who also imagined the region contained untold stores of gold. Cook went southwards until ice barred further progress, and then proceeded to New Zealand. During thick weather, the "Resolution" and "Adventure" parted company; Furneaux explored the coast of Tasmania, being the first European seen there since Tasman discovered it; and the two ships came together again in Queen Charlotte Sound. Several months were spent in cruising among the Pacific Islands, and again the two vessels lost each other. Cook returned to New Zealand, and then headed for Tierra del Fuego, the first straight run across the Pacific. After a time he made for the Cape, and then turned homeward, reaching Spithead in July 1775, after an absence of three years and eighteen days. The "Adventure" had been at home quite a year.

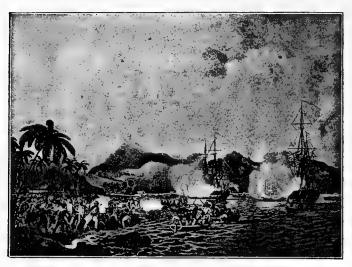
Captain Cook undertook a third great project and fitted out the same vessels for a voyage in search of the North-West Passage; upon this occasion Captain Clerke commanded the "Adventure." It was a similar quest to Martin Frobisher's exactly two hundred years earlier. Old Martin had gone for pure love of adventure and little hope of much reward beyond it; whereas Cook was bound up in the scientific aspects, and a reward of £20,000 now awaited the discoverer of the North-West secret, and all according to Act of Parliament. Cook decided to approach the passage from the Pacific Ocean instead of from the Atlantic. In a round-about voyage he called at New Zealand once more, and at a later period doubled the peninsula of Alaska and explored the Behring Strait; and then returning to winter in the Sandwich Islands, he was

treacherously murdered by the natives.

Captain Cook was one of the world's greatest navigators and ocean explorers. Not only did he add vastly to his country's dominions, but, unlike earlier explorers, he kept accurate records of all that he saw, with notes upon the people, flora and fauna of the lands he visited; and his hydrographic work was of great benefit to navigators in later times. Cook enjoyed a great advantage over Drake and succeeding great voyagers in the improved nautical instruments, especially the sextant and chronometer, that were now available. As remarked in an earlier chapter, to

determine latitude with fair accuracy was not a great problem, but longitude could not be fixed satisfactorily by means of dead reckonings and not a little guesswork. When Halley, the astronomer, invented the sextant, the elevation of the sun could be taken far more accurately than ever before; but what was urgently needed was a clock that would give the difference of local time between any given point on the surface of the globe and the point from which the ship had sailed, or where the clock was set. For a reliable chronometer the British Government offered a reward of £20,000 which was won by John Harrison in 1765.

Our brief period of relaxation from international troubles came



THE DEATH OF CAPTAIN COOK

to an end before the termination of Cook's last voyage, and we commenced a struggle in which eventually Europe and America were arrayed against us. As the effects of the dispute were very far-reaching it will be well to note briefly the causes of it.

This great upheaval commenced in our own American colonies, really in 1765, when an Act was passed by the British Parliament by which legal documents in America had to be stamped and thus pay a tax to Government; and on the face of it there seemed to be some reason why the colonists should pay something towards the huge expenses of the late war, which had relieved them from all fear of France. But the Act broke that great principle for which in England Parliament had fought the Crown, namely, that the people cannot be taxed without the consent of their representatives. The American colonists objected to the imposition of a tax by a

Parliament in which they were not represented, and in retaliation many of them refused to trade with England. The Stamp Act was repealed, only for duties to be imposed on tea, glass, and paper shortly afterwards. Fresh irritation was set up, and in 1770 the duties were removed with the exception of that upon tea. In 1773 there arrived in Boston harbour several cargoes of tea, which were thrown into the sea by the angry colonists, which led our Government to declare that they were in rebellion. Neither side would yield, and the Americans decided to defend their rights by force; war was declared against Great Britain; and in 1775 the deplorable sight was seen of two English-speaking peoples of the same kin, history, and interests commencing to spill each other's blood.

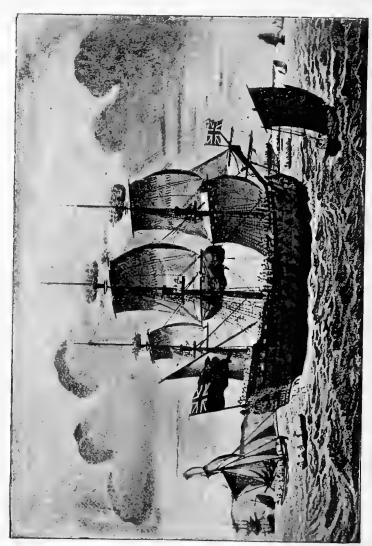
An expedition was sent out from England to quell the rebellion, Vice-Admiral Lord Howe being the commander-in-chief. George Washington was at the head of the American forces, who made an abortive attempt to invade Canada. In July 1776 the colonists issued a Declaration of Independence, to which Howe's reply was the capture of New York and Rhodes Island. Fifteen months later at Saratoga we suffered a great reverse in the surrender of General Burgoyne with about 5000 men. This success of the colonists flicked our old enemy into activity. Eager to be avenged for the loss of her colonial empire, the French recognised the Independence of America; and in February 1778 made a treaty with the colonists, and money, arms, and troops were sent across the Atlantic; but what was of greatest value to the Americans was the French fleet in their waters, which prevented us from reducing their seaboard.

In Parliament and in the country at large there was sharp division of opinion concerning the American War, but there was none respecting our attitude towards France. A fleet of 30 sail under Vice-Admiral the Hon. A. Keppel left Portsmouth; Vice-Admiral Sir Hugh Palliser was second-in-command; and the rear-admiral was Sir Robert Harland. Keppel's flagship was the "Victory," which had been launched at Chatham in 1765, and was to prove not only the most famous battleship in our fleet, but in all the world. Her dimensions were:

						Ft.	In.
Gun deck						1 86	0
Keel						151	3
Beam						52	0
Depth						21	6
	Tons	5, 2162	2. C	Guns, 100			

Other vessels in Keppel's magnificent fleet were six 90-gun ships, one of 80, and 15 of 74 guns each.

In August 1778, off Ushant, Keppel fell in with Count D'Orvilliers in command of 32 sail-of-the-line, but in the ensuing engagement



THE "VICTORY" PASSING DOVER, 1780

only a few ships were damaged on either side. The French were not anxious for close action, which Keppel would have brought about, if Palliser had not failed to support him, either through disobedience or misunderstanding. The Admiralty ordered a court-martial, at which Keppel was acquitted, and Palliser was exonerated, but to a less extent, his explanation being that his ship was too much damaged to obey the admiral's orders. The real trouble again lay in political feeling, for both admirals were members of Parliament, in which they were opposed to each other. During the trial of the two officers public feeling ran very high; the mob attacked Palliser's house in Pall Mall, made a bonfire of his furniture, and burnt his effigy on Tower Hill. Although the House of Commons afterwards voted thanks to Keppel for his conduct in the battle, he was so dissatisfied with the treatment of the Admiralty that he resigned his command.

British troubles were increased in 1779 by Spain entering the fray, joining France in the hope that she might regain Gibraltar. to which she laid siege in July. We had to leave the Rock to depend upon the exertions of the garrison, for Spain had brought 60 fine ships into the conflict, and with their aid France might be able to accomplish that long-threatened invasion of England, for which an army of 50,000 men now awaited in readiness at St Malo.

Not for many years had we been in such grave danger, driving home to us the necessity of a fleet sufficiently strong, not only to cope with any individual nation, but any likely combinations of enemies. Against a joint French and Spanish fleet under D'Orvilliers in the Channel, we could send only 46 sail under Sir Charles Hardy, who had succeeded Keppel; and it was at this time that the "Victory" for the first time in her brilliant career was steered away, instead of towards a foe. Hardy sought the enemy, but when he found that D'Orvilliers had 67 sail-of-the-line with about 30 frigates, he decided to return to Spithead, rather than risk defeat and imperil the safety of the country.

We were now despatching a squadron to the West Indies under Sir George Rodney, who would take command of the station there in the hope of curtailing the activity of the French fleet, which, under D'Estaing, had seized St Vincent and other of our possessions. It was now the last week in December, and our garrison at Gibraltar was in sore straits for food, six months having elapsed since supplies were received from home. On his way out to the West, Rodney was to convoy store-ships to General George Eliott, in command

of the Rock.

Rodney set sail with 20 ships-of-the-line, and off Finnisterre he captured a dozen of Spanish ships loaded with provisions, which were a welcome addition to the stores for Gibraltar. Off Cape St Vincent he fell in with the Spanish squadron of 9 ships that was engaged in blockading the Rock, and although a wild and stormy

night was setting in, Rodney gave chase without hesitation, and succeeded in capturing six of the enemy, while a seventh blew up. It was only thanks to the terrible gale on a cruel winter's night that the remaining two Spaniards managed to escape. Prince William Henry, afterwards William IV, was serving on the "Prince George," the flagship of Rear-Admiral Digby. When the Spanish admiral, Don Juan de Langara, went aboard this ship as a prisoner and was



LORD RODNEY
(From the Painting by Sir Joshua Reynolds)

introduced to Prince William, he expressed his huge surprise at finding a prince of the blood serving as an ordinary midshipman, and sharing with his messmates the wretched accommodation on the orlop deck.

Having thus removed the opposition, Rodney was enabled to effect the relief of Gibraltar, and, sending his convoy on to Minorca, he set sail for the West Indies with 4 battleships. Three weeks after his arrival (17th April 1780), and having picked up reinforcements that raised him to 20 sail-of-the-line and 5 frigates, Rodney endeavoured to engage a French fleet of 25 battleships and

5 frigates under Count de Guichen, who had succeeded D'Estaing. A whole day was spent by the hostile fleets in the endeavour to get the weather-gauge, in which the British admiral outwitted his opponent. Rodney's manœuvres were directed to the ranging of the whole of his ships in opposition to only two-thirds of the enemy; but owing to the faulty signalling arrangements his captains failed to bring off the coup; and after Rodney's flagship, the "Cornwall," almost single-handed, had engaged the enemy hotly and suffered severe damages, the indecisive fight came to an end. Fearing that his ill-success was partly due to lack of loyalty on the part of some of his subordinates, and determined not to be drawn into the same fate as Keppel and Palliser, Rodney announced that any officer failing implicitly to obey the flagship's signals would be suspended instantly, and the warning had good effect.

At the end of 1780 Great Britain declared war against Holland on account of Dutch traders assisting the Americans. We were now face to face with a most tremendous crisis, and our resources would be strained to the utmost. When word of the Dutch entanglement reached Rodney, who had been reinforced by Sir Samuel Hood, he captured the island of St Eustatius, looting it to the tune of two or three millions sterling. Holland had not been dragged willingly into the struggle, and a few such lessons would make her realise, more than ever, how little she had to gain by

being embroiled in it.

At this time the French were making desperate efforts to aid the Americans and to damage us in the West Indies, whither Count de Grasse, in March 1781, sailed from Europe with 26 sail-of-theline and a large convoy. Upon arrival at Martinique he was summoned to the Chesapeake by Washington. For some time we had been holding our own with the colonists, but the tide of war set in against us with the defeat of General Cornwallis, to which De Grasse contributed by blocking the British escape by sea. On 18th October the general surrendered with 7000 men, and practically closed the

war as far as America was concerned.

The British Government early in 1781 decided to attack the Dutch at the Cape of Good Hope, and in March for this purpose Commodore Johnstone set sail with a squadron consisting of one 74, one 64, three 50-gun ships and 5 frigates. In addition to the chief business of the expedition, the squadron was convoying a large number of transports and ships of the East India Company, on which was a small land force for service in the East Indies. In April the British commodore put into Port Praya in the Cape Verde Islands to re-victual, this Portuguese port being neutral. On the 16th, while 1500 men were ashore, 5 French sail-of-the-line, 6 frigates and various smaller vessels were reported in sight. With all speed the British got aboard, and when Admiral De Suffrein, one of the most able commanders France ever possessed, led his

squadron into the bay, Johnstone was ready to receive him with a hot cannonade that beat off the French with considerable loss. One of Suffrein's ships, the "Hannibal," was dismasted and narrowly escaped capture. The French took an East Indiaman, but Johnstone recaptured it on the day following. Our losses were 36 killed and 147 wounded. After receiving this set-back De Suffrein went on to the Cape, which of course put an end to Johnstone's hope of taking it; but the commodore succeeded in capturing in Saldanha Bay five or six Dutch merchantmen heavily laden with rich Eastern produce. Johnstone then sent on a couple of ships to reinforce Admiral Sir Edward Hughes in Indian waters, and with the rest of his squadron and his prizes returned to England.

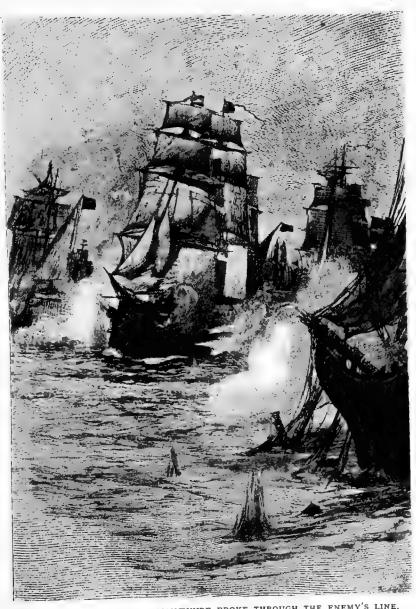
In our home waters in the latter part of the year there were two actions worthy of note. In August on the Dogger Bank Vice-Admiral Hyde Parker with 5 ships-of-the-line and 8 frigates fell in with a Dutch squadron of 13 ships under Admiral Zoutman. A three hours' vigorous action ensued, resulting in the Dutch losing a ship, the "Hollandia," 64 guns, and about a thousand men killed and wounded. Our losses were not half as many, but when Zoutman reached his own coast with his battered ships he claimed

a Dutch victory.

In the second week of December Rear-Admiral Richard Kempenfelt, with 12 ships-of-the-line and a few frigates, encountered Admiral De Guichen off Ushant with 21 battle-ships and 6 frigates, acting as escort to a large number of transports and merchantmen. When Kempenfelt ascertained the strength of the enemy he declined to give battle, but he managed to capture 15 sail, with their crews and over 1000 soldiers who were aboard.

The victory and independence of the United States inspired France and Spain with fresh vigour, and the determination to crush us in the West Indies so that they could concentrate their forces on Great Britain at home. This great crisis was the trumpet-call to Rodney, who in the autumn of 1781 had returned to England owing to ill-health. On 15th January 1782 he hoisted his flag on the "Formidable," 90 guns, and with 12 ships-of-the-line set sail for the West Indies, where the French had captured the islands of St Kitts, Nevis, Montserrat, and had also established themselves in Demerara and Essequibo, in spite of the efforts of Sir Samuel Hood and Admiral Graves, whose squadrons were insufficiently strong to cope with De Grasse.

Upon his arrival at Barbadoes, Rodney picked up a couple of additional ships, and when Hood joined him he found himself at the head of 36 sail-of-the-line, consisting of five 90's, twenty 74's, one 70, and ten 64's; total guns, 2640; 14 frigates and several sloops. At this time De Grasse, with the French and Spanish combined fleets of 34 sail-of-the-line with 2560 guns, was projecting an attack on Jamaica. Rodney, well informed of



RODNEY BY A BRILLIANT MANŒUVRE BROKE THROUGH THE ENEMY'S LINE, BATTLE OF THE SAINTS, APRIL 12TH, 1782

the enemy's movements by his frigates, set sail to intercept Hood's old foe.

On 12th April, in the neighbourhood of the Saints Islands, Rodney was able to bring De Grasse to action, thanks largely to his fleet being incommoded by a vessel in tow, which had been damaged in collision. After the ships had engaged in succession, Rodney by a brilliant manœuvre broke through the enemy's line in two places. The effect was to throw the hostile fleet into confusion, and the British leader saw to it that it was not re-formed. Some of the encounters between single ships and isolated groups were of a most desperate character. The "Centaur," 74, attacked the French ship "Cæsar," 74, whose captain nailed his colours to the mast and would not surrender even when the "Bedford," 74, also assailed him; not until the captain was killed and the ship was an absolute wreck did the "Cæsar" strike her colours. The "Glorieux" struck to the "Royal Oak," but not until all her masts had gone over; and very similarly the "Hector" and "Ardent" fell to our "Alcide" and "Belliquex." Rodney's great desire was to engage the "Formidable," 90, with De Grasse's flagship, the "Ville de Paris," 110 guns, and the British admiral hotly pursued his big antagonist. At one point the French ship "Diademe" crossed the path of the "Formidable," which sunk her with a single broadside. Time after time Rodney was baulked by other vessels intervening to screen their flagship, which De Grasse fought with great gallantry. But the "Ville de Paris" was at length brought to bay by the "Canada," 74, shortly aided by Hood in the "Barfleur." The first broadside of the latter killed three-score men, but De Grasse fought on until only himself and two men stood unwounded on the upper deck; and then the gallant Frenchman hauled down his flag and surrendered his sword.

One of Rodney's squadron was the "Hercules," Captain Henry Savage, a martyr to gout who sat in a chair on deck to direct the fight. He had two ensigns hoisted, one nailed to the ensign staff and the other made fast to the peak. It was impossible to haul either of them down. Savage held his fire till he came up with the French flagship, although he was cannonaded furiously by a dozen French ships as the "Hercules" passed them, the British captain shouting uncomplimentary epithets at the enemy. At less than fifty yards' distance the "Hercules" poured a double-shotted broadside into the "Ville de Paris." Savage was wounded and had to go below, telling his men, as he disappeared, "to sink the unmentionable rascals." Presently, bandaged up, he was back in his chair, with his temper worse than ever, and expletives

correspondingly stronger.

But for darkness coming on, Rodney would have taken more of the Frenchmen; and some days later Hood, in pursuit, captured a couple of 64's and two frigates. Our losses were about rooo killed and wounded; but the French casualties numbered 3000 killed alone. The "Ville de Paris" was a particularly fine prize. She was a present from the city of Paris to Louis XV. Her tonnage was 2300, and she cost £156,000 to build, an exceptionally large sum for a single ship in those days.

large sum for a single ship in those days.

After the battle Sir George Rodney went to Jamaica and repaired his ships as far as possible. The "Ramillies," "Canada," and "Centaur," however, were in a very crazy condition, and it



FOUNDERING OF THE "CENTAUR"

was necessary to send them to England before they could be made fit for further active service. At this time there was a fleet of over a hundred merchantmen requiring a convoy to England, and Rodney placed them in charge of Admiral Graves with his three damaged battleships and his French prizes "Ville de Paris," "Glorieux," "Caton," "Hector," and the frigate "Pallas."

This voyage across the Atlantic in stormy weather, which

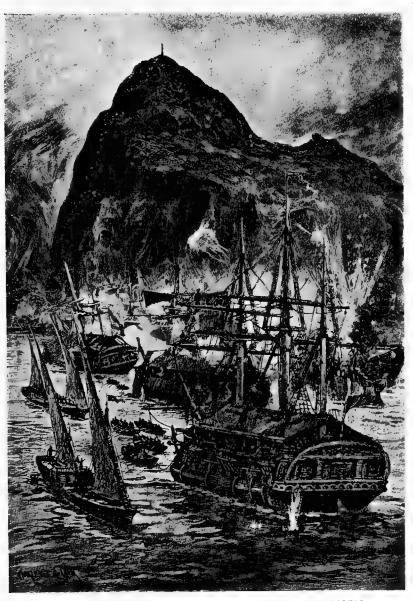
This voyage across the Atlantic in stormy weather, which scattered the fleet, was one almost unbroken tale of disaster. The "Hector" soon lost her wounded masts, and only just before she foundered a small ship fortunately appeared on the scene and rescued 200 of those aboard. The "Caton" had to make for

Halifax to be patched up afresh, but finally reached England. The "Pallas" had to be run ashore at Fayal, where she became a complete wreck. The "Ville de Paris" and "Glorieux" both went down with all aboard, but it was never known exactly when and where the tragedies occurred. So much for Rodney's prizes. Of his trio of shattered battleships only the "Canada" weathered the storms and arrived home safely. The "Ramillies" had to be abandoned after her men had been removed to some of the merchant ships; but the "Centaur" went down, and only eleven of her crew escaped in their one seaworthy small boat.

After a long series of indecisive actions and indefinite results this "Battle of the Saints" was a refreshing change; it intimated to our enemies that our spirit and vigour were unabated. Naturally in England there was unbounded joy: Sir George Rodney and Sir Samuel Hood were raised to the peerage, and Rear-Admiral Drake and Commodore Affleck were created baronets; and in Westminster Abbey monuments were erected to three captains, viz., Lord Robert Manners, William Bayne, and William Blair.

Meanwhile during the foregoing operations Gibraltar was still flying the British flag; Rodney had succoured the garrison in January 1780; and in March 1781 Admiral George Darby got through the cordon with 100 store-ships. From that time onward General Eliott had received no assistance, and the defenders of the Rock were in dire straits, when in September 1782 the besiegers made a grand attack for which they had been making huge preparations. Forty thousand picked troops assailed the Rock on the land side; in the bay were ten great floating batteries, guaranteed shot-proof, and mounting 150 guns. In all, a thousand guns were trained on the defences, some of them among the heaviest artillery yet known. Against this mighty array Eliott had got only 7000 men and 80 guns.

On 13th September the floating and the land batteries, all in awful concert, hammered at the Rock, while 4000 muskets raked every exposed spot. Eliott pounded back, but his 32-lb. shot bounced harmlessly off the floating batteries. The British commander, therefore, commenced to rain red-hot shot on the battering craft, which were set on fire, either to burn or sink, or to blow up. "Fireball" Eliott, thus defying the great assault, the allies settled down to starve the garrison into surrender. It was the province of our fleet to nullify this amiable intention. Towards the end of September, Lord Howe, on the "Victory," commanding 34 ships-of-the-line and a convoy of store-ships, sailed for Gibraltar, and reached the Straits on 11th October. The allied fleet of 49 sail made a half-hearted attempt to intercept the relief, but would not come to close quarters, which allowed Howe to run the store-ships into the bay under the protection of the guns of the Rock, to give the garrison a fresh accession of energy, in case there should be



the british repulse of the grand attack upon gibraltar, september 1782

any further demand upon it. Our neighbouring possession, Minorca, had not been so successful, for Port Mahon, the capital, had fallen

after a siege of only six months.

While Lord Howe was preparing to sail for Gibraltar one of his ships met with unexpected disaster. On the morning of 29th August 1782 the fleet of nearly 40 sail-of-the-line, with frigates and more than two hundred merchantmen, rode at anchor at Spithead. No less than six admirals were flying their flags: Lord Howe in the "Victory"; Barrington in the "Britannia"; Sir S. Hood in the "Queen"; Milbanke in the "Ocean"; Sir E. Hughes in the "Princess Amelia"; and Kempenfelt in the "Royal George." In order to repair one of the pipes in her bottom the "Royal George" was careened, or heeled, over so that the pipe could be reached. The ship was being loaded at the time, and when a cargo of rum was taken aboard the extra weight of the casks and the men engaged in loading caused the three-decker to heel still more. Water poured in through the open lower-deck gun-ports, and although the drummer beat the warning to "Right ship," the "Royal George" filled and went down in deep water. The number that perished was never ascertained definitely, but was supposed to be about 1000 souls, among them many women and children who were on a visit to the crew. Fortunately about 200 men happened to be on the upper deck; and most of these were saved. In the bitter controversy that followed this dire accident, it was said that the side of the ship gave way bodily owing to the rotten state of her timbers. The "Royal George" had been in service twenty-six years, during the whole of which time she was a flagship, some of the admirals she carried being Hawke, Boscawen, Rodney, and Howe.

"But Kempenfelt is gone,
His victories are o'er;
And he and his eight hundred
Shall plough the wave no more."

So hard set had we been in other parts of the world that we had been able to make apparently very inadequate provision to retain our hard-won footing in India. Fortunately for us Admiral Sir Edward Hughes, the commander on the East Indian Station, rose splendidly to the occasion. Without actual brilliance he was a dogged fighter, who believed in close action. He had been bred in a good school, having among his various activities served under Vernon at Porto Bello and Saunders at Quebec.

Appointed to the command in the East Indies in 1779, Hughes set sail with a squadron of five ships, himself aboard the "Superb," 74 guns. He reached India at a time when Warren Hastings, the Governor of Bengal, had got his hands extremely full. The French had stirred up powerful native tribes, against whom stern measures



THE LOSS OF THE "ROYAL GEORGE," 29TH AUGUST 1782 (From the Painting by J. C. Schelthy)

were necessary. One large British force surrendered, but our fleet captured the French settlements of Pondicherry and Mahé. Hyder Ali, the ruler of Mysore, then espoused the cause of France and marched against Madras; and it was only a victory over him by Sir Eyre Coote that prevented Southern India being lost to us.

Admiral Hughes having arrived, he captured Trincomalee in Ceylon with all the shipping in its fine harbour. This was a Dutch possession, and its loss was a great hindrance to the French fleet, whose base of supplies and harbour for refitting were of necessity

now in the distant Isle of France (Mauritius).

The French sent out another squadron of five ships to the East under the command of De Suffrein, who would make matters hum for the British, if the least opportunity were offered him. In February 1782 Admiral Hughes, with 9 ships, had his first encounter with De Suffrein, off Madras, with 12 ships. For two hours our centre and rear had to bear the brunt of the action, the lightness of the wind preventing the van supporting them; and the "Exeter." 64, flagship of Commodore Richard King, second in command, and the "Superb" were laid open to the fire of four ships at once. When the wind shifted, the French admiral sailed away, leaving the "Exeter" and "Superb" in a badly damaged condition and both with their captains killed. Just before the close of the action, when the "Exeter" was little better than a wreck with two of the enemy bearing down on her, the master asked Commodore King for instructions. The answer was: "There is nothing to be done but to fight her till she sinks."

Sir Edward Hughes retired to Trincomalee to repair damages, and was there joined by the couple of ships which Commodore Johnstone had sent to him from the Cape. On the very day that his brother-in-law, Sir George Rodney, was pulverising De Grasse at the Saints, Hughes was hotly engaging De Suffrein for the second time. Again two of our ships took the bulk of the enemy's shots, the "Superb," Hughes' flagship, being attacked by the "Héros," on which was De Suffrein, and the "Orient"; at the same time the "Monmouth" was engaged with a couple of Frenchmen. The two admirals fought vigorously until the "Héros" sheered off to assist in the attack on the "Monmouth," which lost her main and mizen masts, and would have been captured but for the "Superb" and "Sultan" coming to her rescue. In this

sharp encounter we lost 140 killed and 430 wounded.

Having repaired and refitted at Trincomalee, Hughes again sought the foe in July, and another smart conflict ensued. Space permits mention of only one incident. The French ship "Le "Sévre" struck to the "Sultan," but as the latter was wearing round to join the admiral, a subordinate officer aboard the "Le Sévre" caused a broadside to be poured into the "Sultan," and the French ship rehoisted her colours and got away. Our losses were nearly



AN ENGAGEMENT BETWEEN THE BRITISH AND FRENCH OFF TRINCOMALEE, 3RD SEPTEMBER 1782

80 killed and about 230 wounded; but the French lost 400 killed and 700 wounded.

With the resultant damage to his ships in constant fighting, De Suffrein would be unable much longer to keep the sea without a port in which to refit. A stroke of luck then fell to the French commander, for he was reinforced and recaptured Trincomalee, Hughes coming on the scene only forty-eight hours too late to prevent it. When he had refitted, De Suffrein not only had the advantage by 15 ships to 12, but the British crews were much reduced by sickness. Nevertheless, on 3rd September, in an engagement off Trincomalee, Hughes more than held his own, De Suffrein's flagship losing a couple of masts, and the "Orient" went ashore and was wrecked.

While De Suffrein now had Trincomalee in which to refit, Hughes was forced to go to Bombay instead of Madras, as in a more favourable season. Shortly the British fleet was joined by the ships which Howe had despatched after the relief of Gibraltar. In June 1783 the old opponents were fighting a ding-dong battle off Cuddalore, but again without any decisive result. In any case the encounter was quite unnecessary, for Great Britain and France

had already made peace.

The Peace of Versailles (1783) was very unpopular in Great Britain, but if the war had continued we might have secured even less favourable terms. We acknowledged the Independence of the United States; we practically confirmed the Treaty of Paris (1763) with France; while to Spain were awarded Minorca and Florida. But we could look with pride upon the fact that we had withstood a combination of enemies that would have crushed and humbled any other power. If the blunders of politicians at home had caused us the loss of our American colonies, we had the satisfaction of knowing that the United States, the great new power in the world, consisted mostly of Britons, who had but outgrown the control of the mother country. In the future they might still work jointly for the increase of civilisation and the betterment of the world.

CHAPTER XIII

OUR WOODEN WALLS

The most glorious period in the history of our wooden walls was that between 1702 and 1805, a stressful century of almost continual war with powerful enemies, that put our ships and men to most searching tests, from which both emerged triumphantly. English ships had now reached a pitch of perfection, both as sailers and fighting machines, that enabled them to sail to any distant part of

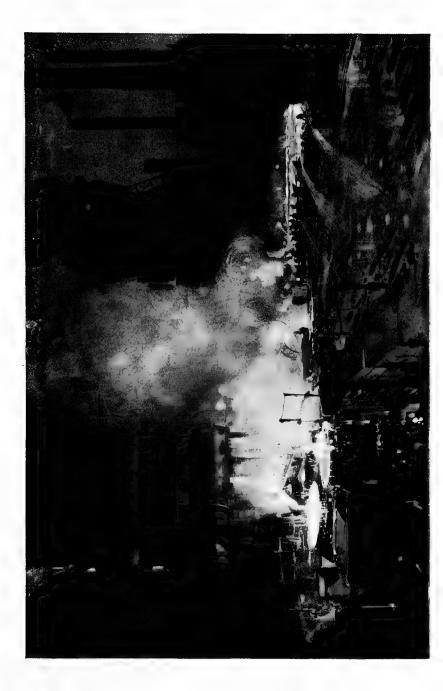
the world and to keep the sea for long periods.

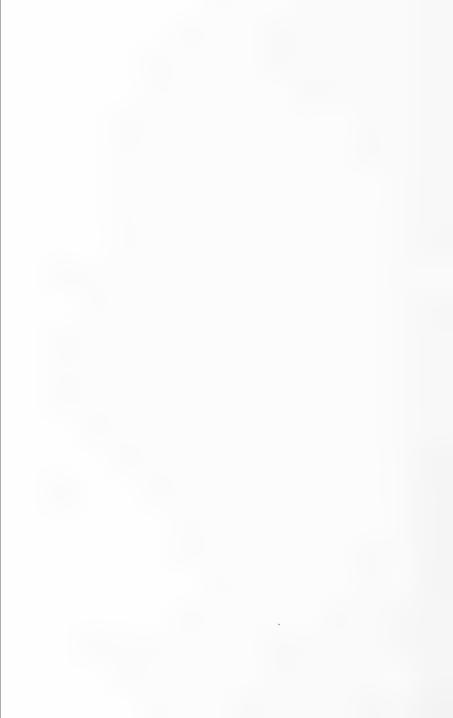
The chief royal shipbuilding yards were at Chatham, Deptford, Woolwich, Plymouth, and Devonport. The first-rates and other big vessels were built in dry dock and floated out, while the smaller ones were built on slips that sloped down to the water's edge. Reference has been made to the effect open-air building had on the timbers of ships. In later times they were constructed under cover, which gave vessels much longer lives; the modern warship is built in the open, but as wood forms no part of the hull, the weather

effects are practically nil.

"Hearts of Oak," indeed, were our wooden walls, for to build even a 74-gun ship, the third-rate, of which our Navy contained so many, from 1500 to 2000 oak trees were needed. There was no wonder that British oak grew scarcer and more costly, and we had to requisition oak of foreign growth, that was less lasting than our native variety. The sheathing of vessels below the waterline was one of the greatest problems of the shipbuilder; and he tried various expedients to defeat the ravages of the teredo worm that was a special enemy of oak. Sheathing with lead was a device even of the ancients, but our builders found it too heavy, and in any case it was not very effective. A common and fairly efficacious method was to put on a layer of pitch, upon which was plastered brown paper, short hair and tar, which was then covered with a thin planking of deal, which wood was least to the liking of the teredo. the middle of the eighteenth century a 32-gun frigate was given a sheathing of thin sheets of copper. This not only repelled the teredo worm, but the ship's bottom was less subject to the accumulation of barnacles, etc., that often impeded the speed of a ship with a wooden bottom by several knots an hour. But copper sheathing

A SHIP-OF-THE-LINE CRUISING





was found to have its disadvantages, for it corroded the heads of all the iron bolts with which it came in contact. This was avoided by first using a thin sheathing of wood to prevent the direct contact of the copper with the bolts. Later, copper bolts were employed instead of iron, and copper sheathing became general, not only in the Navy, but also in the merchant service.

At one time masts were made from single trees, but now they generally were built up of two or more pieces of fir, secured together with iron hoops. At the royal yards were kept immense stocks of masts, spars, sails, etc., suitable for all rates, which were built as like as possible; and thus a mast or spar of any one 74, for example, would fit any other 74 in the service. Theoretically the idea was quite sound, but it broke down largely in practice; for the simple reason that many of our really best ships had been captured from enemies, and taken into our own service, and for these our stock sizes of gear were useless. The French ships, as a rule, were bigger and faster than our own; they possessed larger batteries; and their lowest tier of guns was higher in order to fight them in rough weather; whereas in most English ships, the lower deck-ports could not be opened in a rough sea without danger of swamping the ship. Fortunately for us, the French did not pay equal attention to the effectiveness of their guns, or many of our battles with them would have ended far differently.

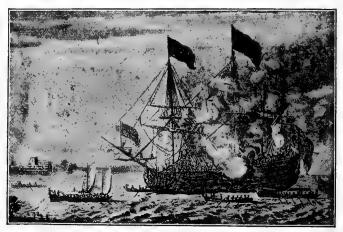
An English first-rate line-of-battle ship measured from 2000 to 2600 tons; length of lower gun-deck about 180 feet; armament, 100 or more guns, with a broadside capacity of about 2500 lbs.; crew, about 900 men; cost of ship, exclusive of guns, from £70,000 to £100,000. Second-rates mounted 90 to 98 guns; tonnage about 2000; crew 750. Third-rates mounted 64, 74 or 80 guns, with broadsides of from 1200 to about 2000 lbs., but not exceeding the last-named figure; the displacement varied from 1300 to 2000 tons; and the crews ranged from 500 to 750 men. Fourth-rates mounted 50 guns; fifth-rates from 32 to 44 guns; and sixth-rates

The external painting of our warships varied, but generally the chief features were somewhat as follows. Just above the copper sheathing a wide black line ran right round the ship, and above this the sides were yellow or brownish, the port lids being of the same colour; the upper works above the gun-decks mainly showed a vivid red or blue; but Nelson adopted a different style, changing the brown or yellow of the sides and outer port-lids to black, with streaks of yellow to mark each gun-deck. This style became known as the "Nelson Chequer." Round the forecastle there was a scarlet or pale blue band with an edging of gold, and this was continued down the beak to the figure-head. The stern generally presented a most ornate appearance, there being a wealth of elaborately-gilded carving, in which cherubs and the like found a prominent

from 20 to 28 guns.

place, together with red and blue and green and gold devices, such as the royal arms, wreaths, cornocupias, etc. The ship's figure-head was sometimes suggested by the name of the ship, although often as not it was a ramping red lion, not necessarily very true to nature, or an allegorical figure, more or less difficult to trace. The seamen generally took a great pride in the figure-head, keeping it in good repair, and its paint and gilt constantly fresh.

The interiors of ships were painted largely according to the fancy of the captain, but the sides of the gun decks were almost invariably of a blood-red colour, so that during an action gruesome



H.M.S. "BRITANNIA," 100 GUNS
(A First-rate, 1721)

splashes would not show more than could be avoided. As the inner port-lids were of this colour, when they were thrown open, the scarlet squares well diversified the sides of the ship. Guns and guncarriages were red or chocolate. Top masts and upper spars generally showed dark brown, with the yards and gaffs black. English masts were often painted white before an engagement, in order not to confound them, in the battle smoke, with the French, who usually painted their masts black.

The terms three-decker and two-decker referred only to complete gun-decks, and in both types of ship guns were carried also on the forecastle and quarter-deck. Dealing with a three-decker and commencing at the bottom, we will take the several decks in order. The orlop deck, which was a non-fighting deck immediately above the hold, was several feet below the water line. It was a gloomy hole lighted only by a few scuttles in the sides of the ship, and by miserable rush-lights in tin sconces or lanterns, which served

for little more than to make the darkness visible. The senior midshipmen, master's and surgeon's mates slung their hammocks in the after-cockpit, which was of considerable size; for it was in this part of the ship that the wounded received attention during and after an action. The table which was fixed in the middle of the berth was not only for mess purposes, but was the surgeon's operating table. Near by the after-cockpit were cabins for the junior lieutenants, surgeon's, purser's and captain's steward. the fore-cockpit were the cabins and store-rooms of the boatswain and carpenter. The greater part of the ship's carpentering was done in the daylight on the upper deck, but in the carpenter's quarters were tools and materials for stopping shot holes, etc. boatswain's storeroom contained everything necessary for refitting and repairing rigging, etc. On the orlop deck, too, were racks in which the seamen stowed their bags, and the marines their chests. Amidships was the sail-room, and also great racks where the cables were coiled, when the ship weighed anchor. The spirit room was sometimes near the after-cockpit, but as often as not it was in the after-hold.

Below the orlop deck were the powder magazines, one fore and one aft, in the hold. These were far below the water line. In the bulkheads of the magazines were built small chambers with windows in which were placed lanterns; thus the magazine was lighted safely from without. The floors and sides of the magazines were covered with thick felt, and anyone entering these rooms had to wear felt slippers; and also had to see that his pockets contained no metal of any kind that could strike and give rise to a spark. The fore-magazine was the larger of the two. Casks of powder were stowed in rows one above the other. Here the cartridges were filled with loose powder, and here were kept the hand grenades, musket cartridges, as well as the cartridges for the 32-pounders on the lower gun-deck.

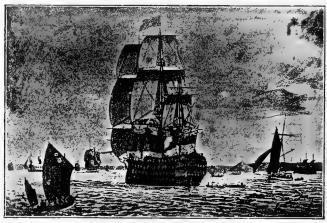
In most ships there was a hoist from this magazine to the orlop, and thus the boys ("powder monkeys"), who carried the explosives to where they were needed, did not have to go into the magazine. The after-magazine was a storeroom used for the cartridges for the 18- and 24-pounders on the upper deck, as well as for the guns or carronades on the forecastle and quarter-deck. The hatches leading from the orlop to the magazines were always guarded by a marine sentry, and during an engagement by a guard with fixed

bayonets, or by midshipmen armed with pistols.

Between the two magazines was the hold, where the two magazines was the hold.

Between the two magazines was the hold, which contained the ballast, provision casks, water casks, etc. The ballast generally was gravel, through which water would drain into the well from which it could be pumped out. Even the best of ships made a lot of water by way of the lower ports, which seldom were quite water-tight. But not infrequently the seams sprung, and, in fact,

sometimes a ship was in such a rickety state, that a stout cable was wound round her for six or seven turns in order to hold her timbers together. Very often this state of affairs was due to dry rot, to which some of the foreign timber, which we used when our native supplies commenced to run short, was very subject. When Anson was rounding Cape Horn in the "Centurion" the vessel grew loose in her upper works, leaking at every seam, so that even the officers seldom slept in a dry bed. The "Portland" a 50-gun ship in Hawke's squadron, did not possess a dry sleeping place for anybody when it rained. This vessel was dismasted during a storm, and when the stumps of the mast were removed they crumbled into powder. Yet the ship was not broken up; she



H.M.S. "LONDON"
(A Second-rate, 1763)

was repaired, and took part in Hawke's famous action with the French off Ushant.

The insanitary conditions on board ship were terrible, and the men had to put up with "undrinkable beer, bad beef, putrid pork, maggoty biscuit and indescribable water." Even as late as the year 1800, Vice-Admiral Lovell complained that "the bread was full of maggots and weevils, the flour musty and swarming with insects, the water so putrid, thick and stinking, that often I held my nose with my hand, while I drank it strained through my pocket-handkerchief."

From the time of the Armada, every man and boy in the Navy was allowed a gallon of beer a day, a quart for the morning, a quart at dinner, a quart in the afternoon, and a quart in the evening. Even for men who required plenty of sustaining food and drink, this might seem a very liberal allowance of liquid, but if it were

bad, it would have been better had there been less of it. During a protracted voyage in the days when preservatives were practically unknown, even with the best of care it would be difficult to keep eatables and drinkables in good condition, but when it was a fact that the fish, flesh, biscuit, peas, meal, etc. were generally kept in the hold, nearest to the poisonous, fever-breeding vapours that arose from the bilge water, one ceases to wonder that the food and drink took to themselves highly undesirable qualities. And this without taking into account that rascally contractors dumped aboard the ship provisions of doubtful quality, even before the voyage commenced.

Above the orlop was the first, or lower gun-deck. On this deck, in the "Victory" for example, were thirty 32-pounders. This deck was the strongest and most roomy; and as it was the scene of the fiercest fighting, it was the principal deck of the ship. The gun-room, the quarters of the gunner and his mess, was right aft; the gun-room was also the armoury, where were stored the muskets, pistols and cutlasses. The chief gunner was supposed to keep an eye on the younger midshipmen, who generally slung their hammocks in the gun-room. If the vessel carried cattle, sheep or pigs, they were usually penned amidships on this lower deck, which did not add to the comfort of the large number of men who ate and slept on the same deck. It was almost as dark here as on the orlop deck below, for even when the weather was only moderately bad, the port-lids had to be closed. Amidships were the racks containing the 32-lb. shot for the guns.

Next above the lower-deck was the middle-deck, carrying twenty-eight 24-pounders; and above that, the upper deck carrying thirty 18-pounders. In a two-decker, there was no middle-deck, but the names of the others were the same as in a three-decker. The upper-deck was upper only between the fore- and the mainmasts; for before the foremast it carried the forecastle; and abaft the main-mast it carried the quarter-deck, above which was the poop, reached by short ladders from the quarter-deck. The quarter-deck and forecastle nominally carried twelve 12-pounders to make up the complement of a hundred guns, but in actual practice, carronades of large calibre often were substituted for the 12-pounders.

The guns were classified according to the weight of the balls they threw; the old names such as are given on page 101 were no longer employed. For a long time we had used a gun that threw a 42-pound shot, but the discharge of a gun so ponderous shocked and strained the timbers of a vessel, and it had to be abolished. From 1790, our biggest gun was the 32-pounder. It was from 8 to $9\frac{1}{2}$ feet long and weighed from 50 to 55 cwts. The powder charge was 10 or 11 lbs. in weight. The point blank range was less than 400 yards; and the extreme range, at about 10° elevation,

was nearly 3000 yards. The 24-pounder varied in length from 6 feet to $9\frac{1}{2}$ feet and the weight from 31 cwts. to 50 cwts. The powder charge was from 6 to 8 lbs. The point blank range was from 220 to 300 yards, and extreme range 2870 yards. The 18-pounder varied from $5\frac{1}{2}$ to $8\frac{1}{2}$ feet in length; weight from 27 to 42 cwts.; and the powder charge and the range were about the same as the 24-pounder. The 9- and 12-pounders, which were as light as 25 cwts., and not heavier than 34 cwts., threw their shots 300 yards at point blank range, or 1800 yards at a 6° elevation.

Carronades, so called because they were first made at Carron, came into use about 1780. They were short and squat, from 2 to 5 feet long, and throwing balls from 6 to 12 lbs. in weight. Being light guns, they were particularly suited to the forecastle and

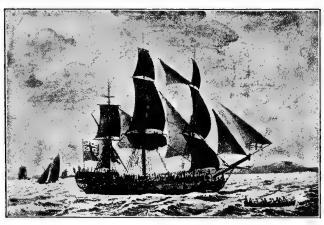


FIGHTING A GUN, 1782

quarter-deck, and the biggest of them could be worked by four men. Owing to their shortness, the point blank range of carronade guns was small. At a 4° elevation a 32-pounder gun had a range of about a mile, but a 32-pounder carronade not much more than half that distance. But the latter was infinitely more destructive, so much so, that it was known as the "devil gun." Swivel guns, that were so often used in the tops, threw a \(\frac{1}{2}\)-pound shot.

The missiles fired by guns and carronades were cast-iron roundshot; leaden shot was perhaps more effective, but too expensive. Being stored in the hold, the shot were subject to rust and they had to be scraped, or they would not enter the muzzles of the guns. Grape shot consisted of a bag of 2-lb. shot, a bag containing sixteen for a 32-pounder, and fewer for the smaller guns. These discharges were very effective against rigging and did much towards bringing down masts. Case, or canister, shot consisted of musket balls, or ½-pound shot packed in tin cylinders. At short range it was murderous, but at a greater distance it spread out and lost its effectiveness. Chain-shot was designed specially against masts and sails; it consisted of two shots joined together with a piece of iron chain. Langridge was a cylinder made up of scraps of old iron, chain, nuts, bolts, etc. For dismantling sails, etc., iron bars of about 2 feet long were bound together. When vessels were engaged alongside each other, or in close action generally, the powder charge was reduced, for a shot fired thus would only just penetrate a hull, but would have a more splintering effect than one which passed clean through the timber at greater velocity.

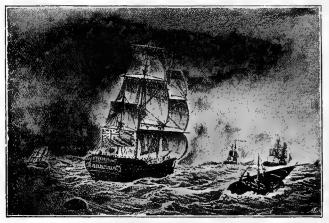
In loading a gun, the powder cartridge was inserted by way of the muzzle, by means of a long-handled shovel, the head of which



H.M.S. "MARLBOROUGH"
(A Third-rate, 1767)

was something like a cylindrical spoon. When the cartridge was thrust into its place, the shovel needed but to be turned over to be free for withdrawal. A wad of rope yarn was then rammed home upon the charge. The shot followed, and was rammed home with a wad of wood wrapped round with yarn. The captain of the gun then thrust his priming-iron, which was a kind of corkscrew apparatus, down the touch-hole, and cut through the cartridge. From his priming-box he took a priming-tube, which contained mealed powder mixed with spirits of wine, and placed it in the touch-hole with its sharp end entering into the cartridge. In place of the priming-tube, sometimes mealed powder was poured from a powder horn into the touch-hole, some of the powder being laid in a little train in a channel cut in the gun. The charge was fired by means of a match, which consisted of twisted cotton wicks soaked in lye, that would keep alight for hours. The wicks, twisted

about a short staff, made what was commonly called a linstock. When the match was applied to the train, the gunner had to spring back smartly to avoid the spurt of flame that came from the vent. Towards the end of the eighteenth century guns were fitted with flint locks, and the gun fired by a spark struck from a flint on to the train containing the priming powder. Although the flint-lock arrangement was safer, easier and quicker than the old match style, for a long time sailors disliked the innovation. It was not until a ship using flint-locks made remarkably good practice at the battle of the Nile that the seamen were convinced of their superiority. The recoil of the guns was very violent, sometimes being lifted



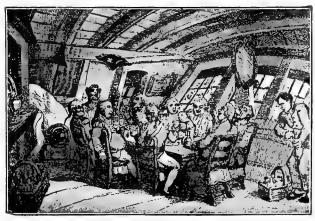
H.M.S. "PHŒNIX (A Fourth-rate, 1781)

up to the beams above; and in action many men were killed or maimed from this cause.

The small arms in use in the Navy were much handier than in former times. The marines used the musket, with a smooth-bore barrel of $\frac{3}{4}$ -inch diameter. It was a flint-lock, muzzle-loader with a sure range of little more than 100 yards, although it might kill at twice that distance. The seamen were trained to use this weapon, too. The musketoon was a big bore with a bell mouth, something like a blunderbuss. The ball weighed from 5 to $7\frac{1}{2}$ ozs. This weapon kicked forcibly and was little used except against boarders. The pistols were cumbrous, especially if they had more than one barrel. Boarders usually carried two of the weapons, throwing them down as soon as emptied, for there was no time to reload, and then going for the enemy with cutlass, boarding-axe, or boarding-pike. The last named was a stout ash staff ending in a metal spike; the whole pike, or halberd, about 8 feet long, with a

metal head, half axe, half spear, was still carried by the sergeant of marines.

During action, a gundeck was "a most infernal scene of slaughter, fire, smoke and uproar." If the ship were engaged on both sides, as was often the case, there would be thirty-two guns in two rows flashing, thundering and recoiling. In a first- or second-rate, only a few feet above, was another deck with its similar pandemonium. Add to these the roar of the carronades on the upper works; the marines firing their muskets, and the swivels at work in the tops. Nor was this all. At rapid intervals, if the enemy were doing good work, there would be the thunderous smashes of their shot as they came home. Men stripped to the waist, working and fighting



H.M.S. "HECTOR" (Ward-room Mess, 1782)

like demons, wounded men screaming, blocks and spars and rigging, if not masts, coming down with crashes—all combined to make a frightful racket. The foul smoke from the black powder came up the hatches, as if from factory chimneys; in some places or other the ship was on fire, happily only to be extinguished before it made headway. In the thick of the fight the cock-pit men were picking up and carrying off the wounded, heaving dead or dying men overboard out of the way. The decks literally ran with blood and had to be sanded to afford foothold for those who still maintained the fight. All told, a ship in action, burning perhaps 1000 lbs. of powder a minute, was like some nether pit with the furies run mad; a demoniacal scene that no pen can adequately describe.

It has been mentioned already that the seamen were berthed on the lower deck: the marines occupied the middle deck in a first-rate, but in a two-decker they joined the seamen on the lower deck. On each of the decks above the lower gun-deck the afterparts were partitioned off to provide living rooms for the officers. The principal cabin was in the after-part of the living deck, and on a flagship this was set apart for the admiral, while the captain's cabin was under the poop, where the first lieutenant, master, and the admiral's secretary also had their cabins. When there was no admiral on board, the captain occupied the better accommodation in the top part of the upper deck. This principal cabin was divided into the fore-cabin and the after-cabin, the latter being the private apartment of the admiral or captain. The fore-cabin was a meeting room for councils of war, court-martials, etc. The after-part of a middle deck in a three-decker, or the afterpart of the upper deck in a two-decker, contained the ward-room, which was the general cabin and mess of the lieutenants, marine officers, master, surgeon, chaplain and purser. In some cases the chaplain messed with the captain, but not at all infrequently neither the captain, nor the occupants of the ward-room, would have anything to do with him, in which case the "sky-pilot" had to mess alone in his own cabin.

It must be remembered that the officers' quarters were portions of the gun-decks and in even the sleeping cabins the occupants had grim guns for company. When a ship was cleared for action, the bulkheads on the gun-decks were taken down and stowed below, and thither went all furniture and everything movable. Each deck thus became an unobstructed gun platform, with nothing to incommode the gunners, or which could be struck into splinters to the danger of the men. When a ship was taken by surprise, and all too little time to prepare for the enemy, everything movable would be thrown overboard through the ports. More than once the French suffered for failing to clear their decks completely. At the battle of Dominica they stowed their mess gear, and even cattle, on the offside of the deck. But when Rodney broke through their line, it was the offside guns that the French needed, and they could not be worked on account of the impedimenta. Rodney was enabled to pound the enemy with shot to which they could not reply; and as the English missiles smashed up the bulkheads, tables, stools, etc., the decks were filled with flying splinters. that carried wounds, if not death, with them. To add to the horrors of the scene were the mutilated and stampeding cattle. Such a lesson should have been unforgettable, yet at the battle of the Nile, many of the French ships had failed to clear their decks, although this was probably due to the fact that they did not expect the attack to commence until the morrow They had no cattle aboard upon that occasion. The British ships had brought a few animals with them from Syracuse, but they were promptly dropped over the sides out of the way.

It was nothing uncommon for war vessels in these days to carry

quite a large number of cattle and sheep in order to supply fresh meat for the crew. For health's sake it was necessary to pay the greatest attention to the cleanliness of the stalls and pens. This was not a very difficult matter in the case of poultry, which were

frequently kept aboard for the use of the principal officers. It is related that a second lieutenant, who was a great stickler for cleanliness gave a goose a coating of whitewash, and coal-tarred its beak and legs. Years afterwards, when the young officer had risen to senior captain, he had an unexpected reminder of the incident. He was taking his seat in a stall at the opera house, Valetta, when a breezy voice from amongst the gods inquired, "Who whitewashed the goose?"

Sometimes a goat was shipped to supply the admiral with milk. Needless to say the animal speedily became the ship's pet, and the sailors would



ADMIRAL, 1797

devote infinite pains to teach the creature to drink rum and chew tobacco. Into the men's grog tub would be put an extra pint of water, so that the four-legged debauchee could have an allowance, and none of its two-legged friends go short of a spot



CAPTAIN, 1797

of their regulation quantum. It would be interesting to learn whether the addiction to rum and tobacco had a good or ill effect upon the milk supplied.

Now for a glance at the personnel of a line-of-battle ship. The captain was responsible for his ship and all who served on her. He possessed almost absolute power. He could not sentence a man to death, except by confirmation of other captains, but he could flog a seaman and cut flesh off his back with a cat-o'-nine-tails until the poor wretch was senseless. He could degrade some of his officers and send them forward. He lived alone, taking his meals by himself, except when he unbent sufficiently to invite

the lieutenants and midshipmen to his table. Whenever he came on deck he was guarded by a red-coat with a drawn sword. But he did not interfere with the ordinary working of the ship, unless matters were going wrong, and called for rectification. Naturally

captains differed in disposition, some being the most tyrannical fiends ever permitted to curse their fellow men, while others were afflicted with streaks of mildness and forgiveness. It may be said that of the two extremes, the seamen almost preferred the man who made their lives a misery. Of course, there were ideal captains who, while martinets in discipline, gained the love and affection of their men by their well-tried courage, their abilities, and their solicitude for the comfort of those who served under them. Of this last type was Nelson, who frequently fought the authorities in order to get redress for the grievances of the seamen. Of the many duties laid down by the Admiralty regulations for the captain, the three outstanding were to defend and maintain the honour



LIEUTENANT, 1787

of his country, to guard the secret of the private signals, and "to burn, sink, and destroy" the enemy, whenever and wherever he could.

On a ship-of-the-line there were from three to eight lieutenants. The first-lieutenant worked the ship according to the captain's orders. He was the captain's proxy in all respects. He spent his days here and there about the ship; but he shared in no night watch, although if danger were afoot, he would be found on deck. A lieutenant of the watch had a host of duties, in the performance of which he would not find time hanging idly on his hands. He saw that the helmsman kept the ship strictly to her

assigned course, that the log was hove hourly, and that the rate of sailing was duly recorded. His eyes were on the men to see that they were smart and alert, and in readiness for any sudden emergency. The midshipmen and master's mates had their duties allotted, but it was the lieutenant who saw that they stuck to their tasks. In the night watch, it was necessary for him to keep the look-out men awake, and not to post them too long at their trying stations. If a sail were sighted at night in war time, the officer at once sent a midshipman to apprise the captain, who would give necessary instructions. While the captain was dressing, the lieutenant would be getting the ship ready for action, but taking care to keep out of gunshot of the strange sail until her identity was disclosed.

The lieutenant was responsible for the master-at-arms going his rounds regularly. Twice during each watch the carpenter's mates had to be sent to sound the ship's well, and to note that the lower-deck ports were quite secured. He also had to send the gunner's mates to examine the lashings of the guns and ease them, if straining. Every morning the boatswain reported to the lieutenant the state of the rigging, and the carpenter the same concerning the masts and yards. The admiral's signals had to be answered and recorded. At night too, there was the lighting of the lanterns and the loading of certain guns, in case they were required for night signals. In time of fog there were arrangements to be made for the firing of guns, beating of a drum, or the striking of the ship's bell. In action, a lieutenant commanded a battery of guns, keeping the men at their posts; endeavouring to infuse spirit into them, if it were needed; and urging them to take careful aim. It was the lieutenant's duty to see that the men kept themselves clean by frequent washing, and that hammocks were scrubbed and clothing washed. Junior lieutenants were in charge of the ship's muskets, and they exercised and trained the seamen in the use of the weapon. If the captain were absent from duty for any length of time on leave or owing to sickness, etc., the firstlieutenant took his place. An important duty that fell to the lieutenant was to see that no boat either left the ship or came alongside without his express permission. In setting forth the foregoing multifarious duties, it is not meant that they all fell to one lieutenant, but they were all within the duties prescribed for the office. These were the ordinary daily and nightly tasks. What lieutenants could do upon special occasions is placed upon record many times in these pages, in brilliant boat actions, and in dashing attacks upon the enemy on land. There was considerable variety in the dress worn by the captains, many of whom adopted whatever uniform they pleased. In the Royal United Service Institution there are preserved some interesting uniforms of captains and lieutenants, which date back to 1748, in which year they were first appointed for wear in the Navy. The three-cornered hats are trimmed with lace, and are adorned with cockades, which George I introduced. The coats of thick blue cloth have the lapels buttoned back; in the captain's coats the cuffs are white. Lace was also often worn at the neck and wrists. The costume of an admiral was very similar, but with a profusion of elaborate lace and rich embroidery. A long white kerseymere waistcoat, white knee-breeches and silk stockings made up a striking attire. The lieutenant's uniform was marked by blue slashed cuffs. At the time of Trafalgar, the captain's lapels were white and the cuffs were striped with gold. Epaulettes came into use only towards the end of the eighteenth century; a captain of three years' standing wore them on both shoulders. With these alterations in the captain's uniform, that of the lieutenant now showed white cuffs.

The master was next in rank to the lieutenant, and in former times was his superior. His chief duty was to control the sailing of the ship, including the trimming and setting of sails, and the manœuvring during an action. The stowage of the hold devolved upon him. He was responsible for the cabin tiers and the spirit room. He examined provisions when they came aboard, and he had to see that old provisions were eaten before inroads were made upon new stock. He examined all beer and water casks every evening. He was responsible for the spare sails in the sail rooms. Ascertaining the ship's position was a daily duty, and in this operation he was assisted by his mates and some of the midshipmen, who thus were taught their business. Whenever a ship was in foreign waters, the master had to survey inlets and carefully record soundings etc., in order to check those marked on the printed charts with which the Admiralty supplied him. If rope were



MIDSHIPMAN, 1787

needed, this officer attended the ropewalk in order to prevent the ropemaker wasting any yarns. A master's uniform differed very little from that of a captain, except that the lapels and cuffs of the coat were blue instead of white; the knee breeches and waistcoat were the usual white.

On first-, second- and third-rate ships the master was assisted by a second master, while on ships of all rates there were master's mates, who engaged in the rougher parts of the master's duties. In the day-time one of these mates kept order on the lower-deck, while it was the duty of another to see that the main-deck was kept as clear as possible. A master's mate was

employed in various other duties, such as booking the number of messes for the information of the first lieutenant; the numbering and fixing of the hammocks; the opening or closing of the port-lids according to the state of the weather. Dinner was ordinarily at noon, but the helmsman, sentries and look-out men went on duty at that time, and consequently took their meal half an hour earlier. It was the duty of the master's mate to attend this earlier meal and see the food served out. The master's mate wore a plain blue frock coat with gold anchor buttons. Like his superior he was supposed to wear a white waist-coat and breeches, but not infrequently he was too poor to obtain them, and wore what clothes he could get.

Next in grade to the master's mate came the midshipman, who usually entered the service through interest. If he had passed two years at Gosport Naval Academy, he was a midshipman from the moment he joined the ship; if not, he entered as a "first class volunteer," and served two years before he was classed as a full

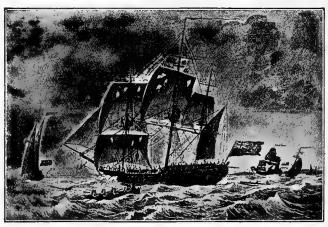
midshipman. First-, second-, and third-rate ships carried from twelve to twenty-four midshipmen. In the time of Nelson a middy could enter the service even before eleven years of age, but later only the sons of officers could enter so young. From nine to twelve each day the midshipman studied under the schoolmaster, who also was expected to pay some attention to the morals of his charges. Often the schoolmaster was the chaplain, to whom the midshipman paid £5 for the instruction he received. In small vessels that did not carry a chaplain or schoolmaster, the education of the youngsters was undertaken by the captain, who in most cases took at least some interest in his youngest officers.

So far as duties were concerned, the chief occupation of the midshipmen was to be at the beck and call of the first lieutenant. When in port they were sent to and fro in the ship's boats. At sea they mixed much with the men in order to learn their duty. In the morning they had to see the hammocks stowed. On some ships they were sent aloft with the men to learn how to furl and reef sails, etc. At the age of fifteen, the middy became an "oldster," and was freed from the schoolmaster, which the budding admiral in most cases viewed as an unmixed blessing. At the same time he received an addition in pay and also attained the dignity of a grog allowance. It was at this stage that the midshipman transferred his quarters to the orlop deck to pass under the charge of the chief gunner. Two years' further service entitled him to be examined for master's mate, a knowledge of seamanship and navigation being the chief qualifications for promotion. Having attained the age of nineteen, and with six years service at his back, he could take the examination for the post of lieutenant. A midshipman could step up direct to the last-named post. It was not compulsory to qualify for master's mate first, but most enthusiastic midshipmen took the intermediate post, if only because it sometimes gave an opportunity of navigating a prize into port.

A midshipman's pay on a first-rate was less than £3 a month, and consequently it was necessary for him to possess private means, if he were to live and dress decently. The regulation uniform was a blue cloth tail-coat lined with silk, ornamented with small gold anchor buttons, and bearing a white patch on the collar; breeches and waistcoat of white nankeen or jean; hat, three-cornered, with a gold loop and cockade. After a long cruise or a protracted stay on a foreign station, the boy often would present a very different appearance, and be garbed in "togs" got from the slop-chest, or even be absolutely in rags. When his wardrobe was at a low ebb and the captain invited him to dine, the youngster would have to borrow from all around, in order to appear with befitting neatness.

In the midshipmen's mess, in the after-cockpit on the orlop deck, a lantern was necessary even in daytime. The dingy hole was not sufficiently high for a middy to wear his hat. It was far from an ideal spot wherein to take a meal, for they were no wafts of Araby that came up from the noisome bilge, to say nothing of the mixed odours from the rancid butter and rotten cheese in the purser's store-room hard by, or the tarry and musty smell of old rope that was ever present, As some of the midshipmen were grown men of from thirty to forty, and master's mates were sometimes quite veterans, the berth was not a particularly choice abode for boys, especially when the grog was flowing at night. It may however, be placed to the credit of the older men, that before they settled down to a carousal, the younger members of the mess were packed off to their hammocks.

These small-fry officers indulged in considerable horse-play



H.M.S. "ALARM".
(A Fifth-rate, 1755)

among themselves, and the weakest got bullied and robbed of a portion of their food. Spare time was occupied chiefly in fighting or fooling, varied by foraging expeditions against the purser's stores for extra food or drink. The middy's berth was generally the most uproarious in the ship, and some of the reprobates were seldom out of hot water. Punishment of these young gentlemen usually took the form of mastheading, sometimes for as long as twenty-four hours. Generally the delinquent could look for no food being sent up from his berth, his absence from mess meaning a trifle more for some of his mates. In such a case some of the topmen would provide the midshipman with food and drink. For sleeping on watch an irascible lieutenant would sometimes have an offending midshipman lashed in the weather rigging; and with his arms and legs stretched out and his face exposed windward, the delinquent found the punishment fairly severe. Some captains

ordered particularly wild midshipmen a dozen with a knotted rope's end; but one captain was court-martialled and reprimanded for what was considered undue severity, and every middy in the fleet rose up and called the court blessed.

Although a midshipman might be a mere child in years, and younger still in experience, he was an officer; and so far as the lower ranks were concerned, he was armed with an officer's powers. malicious youngster could curse or even strike a seaman, however strong and capable, and the man would have to endure it, for resentment would be construed into mutiny, for which the lieutenant would have him flogged at the gangway. In most cases an appeal to the captain would lead to no redress. It is related that an admiral upon one occasion said to his seamen: "By the god of war, I'll make you touch your hats to a midshipman's coat, even though it's only hung on a broomstick to dry."

The surgeon was responsible for the health of all aboard. ordinary sick-bay was in the forecastle, but in war-time it was advisable to remove it to the orlop deck, out of reach of the enemy's shot. The commonest complaint from which the crew suffered was ulcers. Gaol fever was brought aboard newly commissioned ships by the scouring of the prisons, and every year large numbers of sailors died from this disease. Another dread complaint, against which the surgeon had to guard, was scurvy. Even the best of ships were subject to foul smells, liable to breed epidemics amongst men, who were packed together in cramped spaces that were dark, damp, and dismal. At intervals the surgeon would superintend the fumigation of the ship. This was done by burning a preparation of gunpowder and vinegar in pans about the decks, or pans of tobacco and brimstone were used. Fire-buckets were lowered into the hold and then sprinkled with vinegar and brimstone.

In those days medical science included no knowledge of anti-Lint was expensive, and wounds were washed with sponges. As even the sponges were limited in number, one would be used to dress a dozen wounds, with the result that blood-poisoning was often conveyed to a man who was suffering from only a slight injury. During an action a ship's cock-pit was a scene of indescribable horror. As the wounded were brought from above, they were laid down in rows. The rule was, first come, first served; officer or seaman, it made no difference. Serving all alike at first strikes one as perfectly equitable, but in practice it meant that while some were being treated for comparatively light wounds, other terriblymangled sufferers were bleeding to death. The chaplain, purser, stewards, and other non-combatants rendered what aid they could to the sufferers, in giving them drink and applying tourniquets, etc. While the guns boomed overhead, leaping and banging and shaking the ship throughout her timbers, the surgeon and his assistants were busy at the operating table, amputating limbs, etc., by the light of snuffy tallow candles. An operation was performed with remarkable expedition. There were no anæsthetics. The patient took a swig of rum; into his mouth was thrust a leathern pad upon which his teeth could vent his agony, while the surgeon carved and sawed. During a fight nobody worked harder than the surgeons. Everything was done at express speed. A glance at an injury told the practised eye whether it was mortal, or whether there was hope in an operation, and if the latter, it was performed, there and then, in full view of the other sufferers, who were awaiting their turn.

The chaplain ranked and messed with the ward-room officers. as already stated, and sometimes he would add the duties of schoolmaster to his sacred office. The ship's company was expected to attend divine service on Sunday morning, unless the weather, or the presence of an enemy, prevented it. The captain was enjoined by the regulations to support the chaplain in repressing bad language, gambling, drunkenness, quarrelling, etc. Officers and men who died at sea at ordinary times were committed to the deep at the gangway, with a funeral service, in the presence of all aboard. Men killed in action were generally flung overboard without ceremony. Sometimes a ship's company mustered for prayers before a battle; and a thanksgiving service often took place after a victory. The chaplain was supposed to fortify the men with prayers and Christian precepts, when a ship was on fire or foundering; but it is on record that the chaplain at such stressful times generally helped to pass the water buckets or took a hand at the pumps.

The boatswain, or warrant officer, ranked with the master's mates and midshipmen, although not "on the quarter-deck." was in charge of the boats, sails, rigging, cables, anchors, cordage, colours, etc. Usually he was an old sailor, who had his business at his fingers' ends. Every day he inspected the rigging thoroughly, and before going into action he saw that everything was in readiness to repair it, if the enemy caused damage. His badge of office was a silver whistle. When an officer issued an order, the "bosun" sounded the known call belonging to such order, and then shouted it down the hatchway, where the boatswain's mates took up the cry. till the order reached those whom it concerned. And if the crew did not carry out the order with alacrity it would not be the fault of the boatswain and his mates, who used their rattans, or colts, on laggards without mercy. Malingerers were the boatswain's pet aversion, and he picked them out almost unerringly. Says one writer: "This small stick of his seems little inferior to the rod of Moses; it has made many a poor cripple take up his bed and walk; and sometimes it makes the lame to skip and run up the shrouds like a monkey." It was the work of the boatswain and his mates to see the hammocks lashed and stowed, when the men turned out in the morning. The sluggard who failed to turn out smartly stood a good chance of forfeiting his hammock for a month, during which time he had to sleep under a gun, or in any corner that would afford shelter. The boatswain wore a blue cloth coat with blue lapels and collar, gold anchor buttons on the cuffs and pockets. The trousers were blue or white, whichever the wearer fancied. His top-hat was low, glazed, and with a cockade on one side. On a first-rate the pay of a boatswain was about £4, r6s. a month. His mates received about half as much. They wore no distinctive uniform, but their pay enabled them to dress better than the seamen. These mates were really the pick of the seamen, who had been selected to act as drivers of the crew. One unpleasant duty that fell to them was the flogging of men at the gangway, who often were sentenced to that dreadful punishment

for quite trivial offences.

The purser ranked with the boatswain and drew the same pay; but the pay was only a small portion of the money that he could put into his pockets. He was in charge of the ship's provisions. Before commencing duty on a first-rate he had to provide security for £1200, and a smaller sum on the lower-rate ships. Very often merchants, supplying the ship's goods, were the purser's guarantors, and the merchants and purser between them robbed the seamen of a portion of their allowances of food and drink, sometimes by giving out less than the regulations provided, or by foisting on them food of in-



PURSER, 1787

ferior quality. Very often the purser and captain stood in together in these nefarious practices, in which case complaints were little likely to have any effect. In addition to the proceeds of barefaced robbery, the purser received £25 on his accounts being passed; 5 per cent. on the sale price of slops; 5 per cent. on the sale of dead men's clothes; 10 per cent. on the tobacco issued; as well as a number of other perquisites that soon helped to build up a comfortable fortune.

The carpenter held a most responsible post, as shown by his pay of £5, 16s. a month. He was responsible for the good order of the ship's timbers and the pumps; and after rough weather he would carefully examine the masts and yards. During action he and his mates were stationed on the orlop deck, in readiness to stop shot-holes as fast as they were made. One of his under hands was a caulker, ever on the look-out for a defective seam or a faulty port-lid; and it was most important that the flooring of the decks should be kept in good

trim to prevent water dripping below to the discomfort of those berthed there.

The quartermaster's duties did not call for great activity, and consequently this officer was usually an old, but trusted, seaman. His chief work was to superintend the helmsman, to watch the weighing out of provisions by the purser, and to keep the time, which was struck every half hour on the ship's bell. The sailmaker drew the same pay as the quartermaster, viz., £2, 5s. 6d. a month. He kept the sails in good order, repairing old ones, and seeing that new ones were ready, when required.

The master-at-arms was the ship's chief policeman, working under the first lieutenant. He spent most of his time in looking



соок, 1800

for petty breaches of the peace, for which he placed the delinquent in irons until the captain could deal with him, which usually resulted in a flogging. Naturally the quartermaster was by no means a popular person with those who had to thank him for punishment; and as he made his rounds during the dark night watches, he was ever in danger of being paid back by some vindictive sufferer. At one time the master-atarms, as implied by his name, instructed the seamen in the use of the musket, which duty now fell generally to the junior lieutenant. Another very important duty was to take precautions against fire, seeing that

no naked candles were used below decks, and that no unauthorised lights were in use at any time. He also watched that there was no smoking except in the galley, which meant that only a few seamen at any time could enjoy a pipe; but most of the men preferred to chew their tobacco, "like Christians." The master-at-arms had to post all sentinels; and he saw to it that no intoxicants were smuggled aboard from any boat that came alongside. His couple of assistants were known as ship's corporals. They were armed with rattans, like their superior, and did not hesitate to use them on wrong-doers.

The cook was usually an old Greenwich pensioner, and was often minus a limb. He did not cook for the captain, who required a better *chef* than one whose culinary knowledge was almost limited to the boiling of junk and the making of pea-soup. This worthy got only about 35 shillings a month to add to his pension. Half the fat or slush skimmed from the coppers was used for the ship's grease; the other half was the perquisite of the cook, and realised

a decent sum annually. He could have made more, if the regulations had allowed him to sell it to the seamen, who would have used it in making puddings, etc., notwithstanding its unwholesomeness and its liability to breed scurvy.

In past chapters there have been many incidental references to the ordinary seamen; and in the present chapter there have been numerous additions to our knowledge of those who, more or less cheerfully, shed their blood and gave their lives, that those who followed after might live pleasant days. "They passed, those mighty ones, in the blackness of the cock-pit, in the roaring hell of the gun-deck, that we might hear no noise of battle."

In our sea-loving nation there have always been volunteers for the fleet, but when men were required in large numbers, and when, apart from the ordinary wear and tear of a dangerous calling, incessant fighting made frightful gaps in the crews, the volunteer system alone could not provide sufficient men to man the ships. The Royal Navy was a minotaur that simply devoured men, and fresh supplies were got by hook or crook, generally the latter. Boys joined the Navy to become man-of-war's men, and remained so as long as they were fit for service, chiefly because they were never allowed to escape, and also because, after a time, there was no other calling open to them. A good many men joined the service from patriotic motives, speedily to learn that patriotism affoat was a very different thing from singing a song or wagging a flag ashore, when the people at home went mad over a victory. Specious placards, and glib recruiting agents, who spoke glowingly of prize money and endless grog, drew a certain proportion into the net, as did the premiums and bounties that were constantly offered to volunteers.

But the vast majority of our seamen were dragged neck and crop into the service by the press-gangs, who knew a likely man the moment they set eyes on him. Merchant ships were the happy hunting-grounds of the press-gangs, who would often denude a ship of her officers and crew and leave the captain with insufficient men to work his ship. When a warship had got a good nucleus of men, already accustomed to sea life, the vacancies were filled up with any men, who could be seized, anyhow and anywhere. No matter what the landsman's occupation, business or professional man, married or single, they were knocked on the head if they showed fight, and were carried aboard, and remained there till the ship was paid off, or a war was at an end. Another source of supply was the criminal courts, where prisoners were allowed to escape punishment for their crimes by going to sea; in many cases they found out, when it was too late, that they would have been infinitely better off in gaol.

Towards the end of the eighteenth century neither bounties nor the utmost efforts of the press-gangs could provide sufficient men for the Navy's hungry maw; and laws were passed compelling



A PRESS-GANG AT WORK

each county to furnish its quota of men. This was an excellent chance for the sheriffs to ship off gipsies, poachers, and rogues and vagabonds of every description. "In a man-of-war," said Edward Thompson in his "Sailor's Letters," "you have the collected filths of jails: condemned criminals have the alternative of hanging or entering on board, where the scenes of horror and infamy are so many and so great."

Men thus raked together could not all prove good material, else would all have been moulded in the heroic form. The fighting crew necessarily were picked men with their heart in their work; the forecastle men and the top-men were among the smartest of the But in a ship there was endless work that could be done by anybody with a pair of hands, and the brutal discipline ensured the work being done, whether those put to it liked it or not. men of the after-guard and the great company in the ship's waist performed duties that were despised by the real sailors. scavenging, swabbing, pumping and dirty work generally fell to the landsmen; there was work to do in the hold, painting, etc. 1797 an able seaman received 33 shillings a month, but before that time he got a great deal less; an ordinary seaman's pay was 25s. 6d. a month, and the raw landsman received several shillings less. In the seaman's ordinary working dress there was great variety, the main features being white duck or blue cloth trousers, and serge, duck or flannel frocks of blue, red, or green. In Nelson's time the going ashore dress consisted of a blue jacket with brass buttons, often with strips of canvas stitched down the seams; duck trousers, either white or striped; a red waistcoat, although not a few men preferred canary-vellow; a checked shirt; and a low-crowned tarpaulin hat, from which the sailor got the name "tar." On the front of the hat was painted the ship's name. Most men wore a well-greased pigtail down the back. A sheath-knife belt, white silk stockings, an open unstarched collar with a black silk neckerchief, completed a fairly distinctive and picturesque attire.

Something has been said already concerning the quality of the food. The weekly rations for a man consisted as a rule of: biscuit, 7 lbs.; beer, 7 gallons; beef, 4 lbs.; pork, 2 lbs.; pease, 2 pints; oatmeal, r_2 pints; sugar, 6 ozs.; butter, 6 ozs.; and cheese, r_2 ozs. The meat, even when not bad, was dark, gristly and hard as a stone. It might have been rendered fairly eatable by long soaking; but the meat was only put in the steep tub for twenty-four hours, which did little more than dissolve the salt crystals. The pork was a shade better, but even that was so hard that sometimes sailors would carve it into fancy articles instead of eating it. Old tars used to tell the boys awesome stories of the discovery of horse shoes in the meat casks, and of weird barkings and neighings that had been heard down in the holds where the casks were kept; and many an urchin quite believed that any negro who ventured near a naval

victualling yard would disappear and be seen no more, until he showed up on board a ship as junk. The biscuit was often in such a condition that it could almost walk, and it had to be rebaked in the ship's oven. Many of the men, however, would save their "bread" until night, and then darkness would hide, not its deficiencies, but its unwelcome additions. The pea-soup usually was fairly good, but the oatmeal gruel was generally unspeakably bad, and most of it was consigned to the pigs. Many men would not draw this ration at all, choosing to take money instead at the end of a cruise.

Probably the tars were of opinion that there was no such thing as bad beer; some might be better than other, but never bad.



BRITISH SEAMEN, 1779

In any case even bad beer was better than the atrocious water that was carried in none too clean wooden casks. When the beer was exhausted. wines or spirits were dealt out, one pint of wine, or a half pint of rum or brandy, taking the place of a gallon of beer. Christmas day was a great festal occasion aboard ship, and the officers left the men to carouse to their heart's content. For a month they would save up a portion of the daily grog; and on Christmas night practically the whole crew would be in a state of most awful intoxication, and it was no unusual thing for several men to be found dead next morning." The grog

allowance at this time was too large, and there was scarcely a seaman who would not have preferred to take a flogging rather than waste good liquor. Captain Hall says that in ships on hot foreign stations, "one-third of every ship's company were more or less intoxicated every evening." It was an anomaly to punish men with the cat for getting drunk, and yet at the same time offer every encouragement to excess by a too liberal allowance of intoxicants.

The punishments on board ship were terribly drastic. Flogging was considered the only effective way of maintaining discipline; and yet, as Lord Charles Beresford has said, "In those days we had the cat and no discipline; now we have discipline and no cat." Some captains flogged almost the whole ship's company, until sometimes the men scarcely knew whether to kill themselves, or the fiend who made their lives a hell. We shall learn what happened aboard the "Hermione" in 1797, and there were many ships in which similar tragedies easily might have happened.

Flogging had a degrading effect all round; it broke the heart of a good man; it rendered a bad one only callous. That there was no need for undue flogging was proved in many cases. Lord Collingwood insisted upon perfect discipline and his whole ship's company worked with the precision of a machine; yet he rarely flogged more than one man per month, fairly serious offenders only getting from six to a dozen lashes. Unless his crime was theft, a man sentenced to be flogged could always count upon the sympathy of his mess-mates. They would save up some portion of their previous night's grog allowance for him, and thus he was partly, if not wholly, stupefied before the punishment commenced.

The most terrible form of flogging was being "flogged through the fleet," which was the punishment for striking a lieutenant or any officer upwards. In this case the offender was put in a boat, and received so many strokes from a boatswain's mate of his own ship. He was then rowed to each ship of the squadron in turn, and at each vessel he received additional stripes. Even if he died under the punishment, the corpse received the lashes still due; and then it would be buried in the mud on the shore, without any funeral rites. If a man lived through such an ordeal, he would be unfit for service when he was able to leave the sick-

bay; and usually he died within a short time.

Among some of the other punishments was "running the gauntlet" for thieving. The culprit, however, was not allowed to run. First he was flogged by a boatswain's mate with the thieves' cat, and then had to walk slowly between a double line of men who were armed with knotted ropes with which they struck him, even on the head. The victim's pace was ordered by the master-at-arms, who pointed a drawn sword at his breast, while a couple of ship's corporals held similar weapons behind his back. A too hasty advance or a step to the rear entailed a prick from the swords. When the poor wretch had gone through his punishment, his wounds were rubbed with brine, and he lay in hospital until he was healed. Having thus expiated his offence, he was supposed to have "no stain on his character"; and his shipmates would never make reference to the incident.

The boatswain and his mates, the master-at-arms and his corporals, were often requested by the lieutenant to punish a man on the spot for some breach of regulations. In these cases the rattans, or sometimes "colts" of 3-in. rope, were laid unmercifully about a man's head and shoulders, and his arms, with which he endeavoured to protect himself. Ducking in the sea was a punishment in the fleet from very early times, that afterwards developed into keel-hauling, which meant that a man was dropped overboard on one side of the ship, and was then dragged under the keel and pulled up on the other side. In the eighteenth century this punishment had been discontinued. Although the majority of the men

were confirmed chewers, spitting on the decks called forth instant punishment, more inconvenient than painful. The offender had to walk about with a bucket suspended round his neck, until it was considered the necessity for better manners had been impressed

upon him sufficiently.

Here must end this fragmentary sketch of life aboard our eighteenth century ships of war. It was the discipline in the fleet, in spite of its barbarities and inhumanities, that made the British Navy feared by every foreign fleet that sailed the seas, and that has led up to the unrivalled war machine that it is to-day. And our great heritage was won for us by the splendid victories gained by the men who manned our wooden walls. Surely we ought to bare our heads when we think of those hard-living, hard-fighting, hard-dying brave souls

[&]quot;Whose bones are white by many a shore, They sleep with Admiral Death."

CHAPTER XIV

THE STRUGGLE FOR SEA POWER

WE are now at the commencement of a most exciting period of our naval history. With the great empire we had acquired, it was more than ever necessary that we should gain that absolute supremacy at sea for which we had struggled with France for a hundred years—ever since Russell smashed De Tourville at La Hogue in 1692. Although we had consistently beaten our rival, even when aided by other countries, we were still far short of the necessary superiority, short of which we could not develop our Empire in peace. To gain our end would necessitate a long period of war, marked by a long succession of brilliant victories, achieved

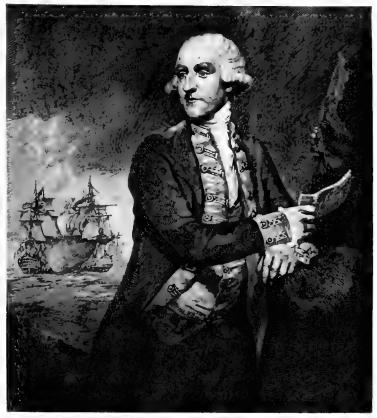
mainly by the unexampled naval genius of one man.

When the Treaty of Versailles brought us to the commencement of a ten years' peace we had in commission II2 ships-of-the-line, 20 ships of 50 guns, and I30 frigates and 200 sloops; the men employed in the fleet numbered II0,000, including marines. A year later the men were cut down to 25,000. In the year I789 the people of France rose bodily against the King, the nobility and the laws, which developed into a war of the people against the aristocracy, marked by all manner of terrible excesses. The streets of Paris ran with blood; the death tumbrils rumbled along the boulevards conveying their doomed loads to the dripping guillotine; Louis XVI and his beautiful queen, Marie Antoinette, suffered the death penalty on 1st January 1793; and on 1st February the French National Convention declared war against England and Holland, and a month later against Spain.

Fortunately for us, threatened trouble, with Spain in 1790 and with Russia in 1791, had set our dockyards ringing with preparations, so that the unexpected challenge by France found us more than fairly well prepared. At this time we had over 100 ships-of-the-line and 100 frigates, mostly at home, for the squadrons on foreign stations had been greatly reduced; over 60 of our battle-ships were in excellent condition; and in a remarkably short time we reinforced the Channel squadron, and fitted out a powerful force to proceed to the Mediterranean, where Toulon was now

little inferior to Brest in importance.

Never in its history had the French fleet been so powerful, numbering 200 sail, 82 of them being ships-of-the-line and 84 frigates. Some of the French ships were far larger than any we possessed, e.g. the "Commerce de Marseilles," "Côte d'Or," and the "Sans Culotte," of 120 guns each; there were five 110-gun



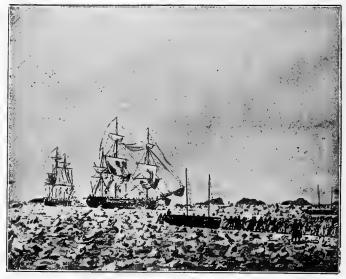
LORD HOOD
(From the Painting by Sir Joshua Reynolds)

ships, ten of 80 guns and sixty-four of 74 guns. As an intimation of its relentless purpose, the National Convention was laying down at once seventy new keels.

Lord Hood was appointed to the command of our Mediterranean squadron of 21 sail-of-the-line, consisting of three 100-gun ships, two 98's, twelve 74's, and four 64's. The commander-in-chief's flagship was the "Victory," 100 guns, which also carried Rear-

Admiral Hyde Parker; the "Britannia," 100, bore the flag of Vice-Admiral William Hotham; the "Windsor Castle," 100, of Vice-Admiral Philip Cosby; the "Princess Royal," 98, of Rear-Admiral Charles Goodall; and the "St George," 98, of Rear-Admiral John Gell. Among the 64's was the "Agamemnon," bearing the pennant of Captain Horatio Nelson, whose twenty-two years' service in the Navy may be reviewed at this juncture.

Horatio Nelson joined the Navy on 1st January 1771, serving as midshipman on the "Raissonable" under his uncle, Captain



H.M.S. "RACEHORSE" AND "CARCASS" IN THE ARCTIC OCEAN, 1773

(J. Cleveley)

Maurice Suckling. When the latter was moved to the "Triumph," 74 guns, acting as guardship in the Thames, the youngster was sent in a merchantman on a voyage to the West Indies. In the spring of 1773 he went aboard the "Carcass," one of two vessels engaged in Polar exploration. Next we find Nelson as a midshipman on the "Seahorse," 20, in the East Indies, under Sir Edward Hughes, who so stubbornly fought De Suffrein. In October 1776 he was acting-lieutenant on the "Worcester," 64, out with a convoy to Gibraltar. In the middle of the next year he was first-lieutenant on the "Lowestoffe" frigate, off Jamaica. In 1778 he was first lieutenant in the "Bristol" flagship, which he left before the end of the year to become commander of the "Badger" brig. Nelson was appointed Captain of the "Hitchinbrook," 28 guns, in June 1779, when he was barely twenty-two years old.

At that time Admiral D'Estaing was threatening Jamaica, and Nelson was sent ashore to command the batteries of Fort Charles at Port Royal. He was next appointed to the naval command of an expedition against Fort St Juan at the entrance to Lake Nicaragua. The operations were conducted in the rainy season and the seamen suffered terribly from sickness. Of 200



CAPTAIN HORATIO NELSON MEETING THE DUKE OF CLARENCE, A MIDDY ON THE "BARFLEUR"

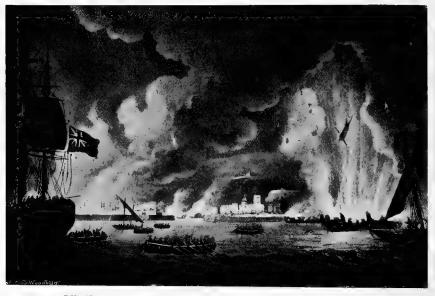
men from the "Hitchinbrook," 145 were buried in the pestilential land and 45 died shortly afterwards. Colonel Polson, who commanded the troops, thus officially reported: "I want words to express the obligations I owe Captain Nelson. He was the first on every service, whether by night or day. There was scarcely a gun but what was pointed by him or Lieutenant Despard."

Nelson was next given command of the "Janus," 44, but was invalided home instead of taking it up; but after a rest of four months he became captain of the "Albemarle," 28, an old French merchantman bought from its captors for the King's service. On

this ship he voyaged to the Baltic with a convoy; next sailed to Canada, from whence he convoyed transports to New York. At Sandy Hook he met Lord Hood with a detachment of Rodney's victorious fleet; and here Nelson was introduced to Prince William Henry, Duke of Clarence, a middy on the "Barfleur." The Duke, who was Nelson's firm friend from that time, described him as "the merest boy of a captain he had ever seen."

From New York the "Albemarle went to the West Indies,

From New York the "Albemarle went to the West Indies, and returned to England in June 1783. Nine months later Nelson was captain of the "Boreas," 28, going to Leeward Islands as a



BURNING OF THE FRENCH FLEET AT TOULON, DECEMBER 1793

cruiser on a peace establishment; and on the station he was senior captain and second-in-command. From the "Boreas" Nelson was appointed to the "Agamemnon," which may be taken

as the beginning of his real war service.

Lord Hood's squadron left England in May 1793, and when it had met two convoys from India and the Mediterranean, and had seen them safely past the Scilly Isles, proceeded south, arriving off Toulon in July, where Admiral Langara joined the British with a Spanish fleet of 17 fine ships manned by very inefficient crews. The allied fleet blockaded Toulon and Marseilles. In Toulon was a French fleet of 20 sail-of-the-line under Count Trogoff, who, with a portion of the force, was in favour of the monarchy, while Admiral Jullien, seecond-in-command, preferred a republic, and

was supported by the rest of the fleet. On 23rd August the authorities of Toulon surrendered the town to Lord Hood, giving him possession of the harbour and dockyard together with the French ships. Upon this, Jullien and about 5000 sailors deserted Trogoff, and went to join the army under General Carteau who was advancing to take Toulon, which, like most of the south of France, was strongly monarchical.

Lord Hood landed a couple of regiments, that he had brought out from England, but the force was insufficient to hold Toulon against the increasing army with which the Republicans were besieging it. Be it noted that a young artillery captain, who caused destructive batteries to be erected against the Royalists and their British and Spanish allies, was Napoleon Bonaparte, whose military genius shortly threatened to make all Europe a province of France. The allies evacuated Toulon on 17th and 18th December, taking 14,000 of the loyal inhabitants aboard the fleet. We blew up the arsenal, magazines and the forts that had been in our possession; burnt or destroyed ten ships-of-the-line and several frigates; and brought away four ships-of-the-line, among them the "Commerce de Marseilles," which was sent to Portsmouth. The French would have lost more ships but that the Spaniards, entrusted with a portion of the task, failed to complete their operations. During the night the British and Spanish ships got into the outer road, leaving the town in the hands of the Republican troops, who butchered some 6000 of the inhabitants.

A couple of months after our Mediterranean squadron left home Lord Howe, in the "Queen Charlotte," 100 guns, went to sea with 15 sail-of-the-line and 9 frigates. He proceeded to the opposite coast to look for the French fleet with its headquarters at Brest, but the year ended without any features worth mentioning. In the following spring (1794) Villaret Joyeuse was given command of the French fleet, with instructions to go out and see safely into French ports a fleet of 350 provision ships, which were on their way from America to atone for the bad harvest in the previous autumn, for France was threatened seriously with famine.

Villaret Joyeuse was but a post-captain under the French monarchy, but when the Revolutionists guillotined the nobility not a few of their best naval officers suffered, and consequently there had been many rapid promotions in the French fleet. The discipline, too, on the French ships was tainted by the general contempt for authority that had brought about the revolution; and a fleet without discipline is the next worst thing to the ships being without rudders.

Lord Howe's squadron, cruising off Ushant, consisted of 26 sail-of-the-line and 7 or 8 frigates. As in this fleet no less than seven admirals flew their flags, and there were many captains, who

already had distinguished themselves, or shortly would rise to fame, the ships and officers may be set out in detail:

Ship.	Guns.	Officer in Command.
" Queen Charlotte	. 100	Admiral Earl Howe.
~		Captain Sir Roger Curtis
		,, Sir Andrew Douglas.
" Royal George	. 100	Vice-Admiral Sir Alexander Hood
<i>y</i> 0		Captain W. Domett
"Royal Sovereign"	. 100	Vice-Admiral Thomas Graves
•		Captain Henry Nichols
"Barfleur".	. 98	Rear-Admiral George Bowyer
		Captain Cuthbert Collingwood
" Impregnable	. 98	Rear-Admiral B. Caldwell
1 0		Captain George Westcott
" Queen " .	. 98	Rear-Admiral Alan Gardner
~		Captain John Hutt
"Glory"	. 98	Captain John Elphinstone;
" Gibraltar "	. 80	Captain Thomas Mackenzie
"Cæsar"	. 80	Captain Anthony J. Molloy
" Bellerophon	. 80	Rear-Admiral Thomas Pasley
		Captain William Hope
" Montague " .	· 74	Captain James Montague
" Tremendous "	· 74	,, James Pigott
" Valiant " .	· 74	,, Thomas Pringle
"Ramillies".	· 74	" Henry Harvey
" Audacious " .	· 74	" William Parker
" Brunswick " .	· 74	" John Harvey
" Alfred " .	· 74	" John Bazeley
" Defence " .	· 74	" James Gambier
" Leviathan " .	· 74	" Lord Hugh Seymour
" Majestic " .	· 74	,, Charles Cotton
" Invincible " .	· 74	,, Hon. Thomas Pakenham
"Orion".	· 74	" John T. Duckworth
"Russell".	• 74	" John W. Payne
" Marlborough "	· 74	"Hon. C. Crawford Berkeley
"Thunderer".	· 74	" Albemarle Bertie
"Culloden" .	· 74	" Isaac Schomberg

The frigates were the "Phæton" (Captain William Bentinck) and "Latona" (Captain Edward Thornborough), 38's; "Niger" (Captain Hon. Kaye Legge), "Southampton" (Captain Hon. Robert Forbes), "Venus" (Captain William Brown), and "Aquilon" (Captain Hon. Robert Stopford), 32's; and "Pegasus" (Captain Robert Barlow), 28.

The French fleet was of about equal numerical strength to the British, but the calibre of their guns was greater than ours. an entire broadside of their fleet outweighing the British by more than 5000 lbs.; and the French crews exceeded ours by about 3000 men. But almost more than ships or guns in action, it is the calibre of the men that counts, and in that respect the advantage lay wholly with the British.

The two fleets met on 29th May, and a partial engagement took place, in which the "Revolutionnaire," 110 guns, was badly damaged by several of our ships, one of which, the "Audacious," 74, was crippled and had to return to Plymouth. The next day the combat was renewed until it was impeded by fog, which did



LORD HOWE

not clear off till the morning of 1st June, when Joyeuse was only six miles off to leeward, and Howe bore down upon the enemy.

The British fleet were in line abreast, the "Defence," a little in advance, first receiving the enemy's fire at 9 o'clock, the French leading vessels then being in line ahead. Howe ordered the "Queen Charlotte" to be steered straight for the "Montagne," 120 guns, the flagship of M. Villaret Joyeuse. The "Vengeur," 74, opened fire on him, but Howe kept on until abreast of the "Achille," 74, which also gave him a broadside, to which the "Queen Charlotte" replied with her quarter-deck guns. Howe kept on and forced a passage through the enemy's compact line, until he could pass under the stern of the huge three-decker. So close were the two vessels that the lower rigging of the British ship brushed the French tri-

colour, and at that moment a tremendous broadside was poured into the "Montagne's" stern. The "Jacobin," 80, next astern the French flagship was bearing up to avoid Howe's starboard broadside, but the "Queen Charlotte's" helm was put hard a starboard and the "Jacobin" received the broadside in her port quarter, but with what of her guns would bear she shot away Howe's foretopmast, which prevented him from laying himself alongside the "Montagne," but he kept up a cannonade on her starboard quarter, killing and wounding 300 men. The French admiral had to sustain this fire without being able to return a shot, and consequently bore away out of line, an example which was followd by the "Jacobin" and several other ships; and Lord Howe signalled to give chase.

Meanwhile other British vessels had been engaging the enemy hotly. The "Bellerophon," owing to the "Cæsar" failing to support her, came under the heavy fire of three ships which caused her the loss of her fore and main topmast, but her guns were well served and she stood away. She was much cut up aloft, but her losses were only four killed and less than thirty wounded, among the latter being Rear-Admiral Pasley, who had lost a leg. The "Leviathan" engaged the "Amerique," 74, and reduced her to an unmanageable hulk, with her main and mizen-masts over the side, and a third of her crew killed and wounded. The "Leviathan," being signalled by the admiral to close, did not capture her crippled opponent, whose flag still flew on the stump of the mizenmast; but she fell a little later to the "Royal Sovereign," which had shot away the main- and mizen-masts of the "Terrible," IIO. In this fierce tussle Vice-Admiral Graves was severely wounded. The "Russell," having engaged the "Téméraire," shot away the enemy's fore-topmast, and later was busy with the "Eole" and "Trajan," 74's, and ended up with firing into the stern of the "Amerique." The "Marlborough" passed under the stern of the "Impétueux," 74, and, hauling up to leeward, engaged her closely with the muzzles of their guns almost touching. While this furious fight was in progress the "Mucius," 74, in sailing away from the "Defence," fell aboard the "Marlborough." The latter ship had already lost her mizen-mast, and now her fore and main masts went over the side; but the British crew worked their guns so desperately that shortly both her opponents were as great cripples as herself. But the "Marlborough" had yet to receive a broadside in her stern from the "Montagne," which reduced her to a helpless state, and necessitated her being towed out of action by the "Aquilon" frigate. The "Marlborough" lost 29 killed and 68 wounded, among them Captain Berkeley.

When the "Queen Charlotte" passed through the enemy's line at the commencement of the action the "Brunswick," her next astern, endeavoured to pass between the "Achille" and "Vengeur."



LURD BOWL'S GLOSTOUS BEITISH VICTORY OVER THE FEED OF PLEET OFF USBANT, JUNE 15T, 1794

But the latter, closing in, the gallant Captain Harvey did not hesitate to run the French ship aboard on windward to hook his opponent, saying, "We have got her and we'll keep her." With their guns in close contact, they dropped out of line to commence a terribly grim struggle. The "Achille" bore down on the "Brunswick's" starbaord quarter at II A.M., with her gangways and rigging crowded with men ready for boarding; but the British 74 brought down her masts, which left the "Achille" an easy prey to the "Ramillies" later. The fight between the "Brunswick" and the "Vengeur" waxed more furious. Captain Harvey was knocked down by a splinter, and shortly afterwards retired below mortally wounded, saying: "Remember my last words—the colours of the Brunswick' shall never be struck." The command was then taken by Lieutenant Cracroft. After being locked in a deadly embrace for three hours the "Vengeur" swung clear, tearing away the anchor from the "Brunswick's" bow. By this time the "Ramillies" was standing by waiting to open fire on the Frenchman, as soon as he could do so without danger of hitting the "Brunswick," but the last-named was able to complete her own work by a welldirected broadside, that smashed the "Vengeur's" rudder and tore a huge hole in her stern at the water-line. Although she was sinking, the French ship flew her ensign defiantly, until more shots from the "Brunswick" and the "Ramillies" caused her to hang out a token of, not only submission, but distress. Fortunately for the survivors of the "Vengeur" the battle was then practically at an end, and three British ships were able to take off about 400 of the crew, including the gallant Captain Renaudin; but the riddled hulk sunk while there were yet 200 men aboard. Lieutenant Rotherham of the "Culloden," who assisted in the rescuing operations, reported to his captain, that on the "Vengeur," "you could not put a two-foot rule anywhere in her without touching two shot-holes!" The state of the "Brunswick" testified to the ding-dong nature of the contest in which she had been engaged. Her mizen-mast had gone and her other masts were so badly damaged that she was unable to haul up and could do nothing but steer northwards towards the nearest British port. She had been on fire three times; her starboard galley was knocked away, and nearly two dozen of her 74 guns were dismounted. Out of a crew of nearly 600 she lost 41 killed, including Captain Harvey, and 120 wounded.

Various other British ships bore their part nobly throughout the battle. The "Queen" endeavoured to get alongside the French ship "Northumberland," but though she failed in that immediate object her gunners damaged the masts of the French 74 so badly, that shortly they fell over the side. She then steered straight for the "Jemappes," 74, and shot away her mizen-mast; but the mainmast of the "Queen" went over, smashing part of the poop and the quarter-deck bulwarks; but Admiral Gardner

had his revenge in fetching down the fore- and main-masts of the "Jemappes," and, pouring into her a destructive fire, drove her men from their guns on to the deck to wave their hats in token of surrender. While the "Queen" was repairing her damages the "Montagne" and ten other ships endeavoured to cut her off from the rest of the fleet; but Lord Howe went to her assistance and signalled to the nearest ships to close in and form in line for her protection. Villaret Joyeuse did not care to risk another encounter with the British flagship and bore off eastward.

The "Royal George," passing between the "Sanspariel" and "Republicaine," engaged both ships, and, when the "Glory" also came to the attack, the "Sanspariel" struck her colours; and the same fate befell the "Juste" and "Northumberland,"

the latter yielding to the fire of the "Orion and" "Queen."

This great battle known as, "The Glorious First of June," really came to an end with the sinking of the "Vengeur," for by that time the remainder of the French fleet were in full flight, and if Lord Howe had sent in pursuit the few of his squadron that were little damaged, some of the dismasted enemy could not have escaped. But there are limits to human endurnace; many of our ships were badly battered; and the men who were unwounded were practically exhausted. It must be remarked that although "Black Dick," as Lord Howe was called, formed his fleet in line abreast, the battle developed into a ship-to-ship attack quite reminiscent of earlier days. This was decided upon by Howe, because he realised that ship for ship we were superior in gunnery and general efficiency.

There is no space to tell of all the stirring incidents witnessed in the fight, many brilliant, some pathetic, and not a few amusing. For the brilliant ones the foregoing recital must serve. The fate of the "Vengeur" was pathetic in itself, but there was one intensely human touch about it that should be placed on record. Captain Renaudin had aboard with him his son of twelve years of age. Father and son were rescued by the boats of two different British ships, and each imagined the other lost and mourned accordingly. Not until they reached Portsmouth as prisoners were father and son

reunited, to their great joy.

But that it is too well authenticated to be doubted, one would be inclined to view the following as merely a sailor's "tough yarn." When the "Marlborough" lost a couple of her masts, a cock which had been released from its coop by a shot, flew upon the stump of the main-mast, flapped its wings, and crowed defiantly. Chanticleer upon the arrival of the ship at Plymouth was presented to Lord George Lennox, in whose care it lived to a ripe old age. The "Brunswick's" figure-head was an effigy, in military uniform, of the reigning Duke of Brunswick. Quite early in the fight a shot struck off the big carved wooden hat of the ducal figure-head.

When the men, working the forecastle guns, noticed this disrespectful treatment of the Duke, they sent a request to Captain Harvey that he would give them one of his own gold-laced cocked hats to replace the missing headgear. The captain, amid the spattering French bullets around them, laughingly consented, and shortly some of the men clambered out and nailed the hat on the effigy.

"The Glorious First of June," cost us 222 killed and 700 wounded; but the French lost six times as many. The trophies of the great victory consisted of the "Sanspareil" and "Juste," 80's, and the "Achille," "Amerique," "Impetueux" and "Northumberland," 74's, most of which were added to our fleet, and afterwards rendered us good service. Upon the return of Lord Howe and his fleet to Spithead on 13th June, the royal family went down to Portsmouth, and on the "Queen Charlotte" King George III presented his lordship with a sword set with diamonds and valued at £3000, and also a gold chain to be worn around the neck. Vice-Admiral Graves, second in command, was raised to the peerage as Lord Graves; Sir Alexander Hood became Lord Bridport. Rear-Admirals Gardner, Bowyer and Pasley received baronetcies, to the two latter a pension of £1000 per annum being granted on account of their wounds. The senior lieutenants were made commanders; and the two houses of Parliament passed a vote of thanks to the officers and men of the fleet.

There were various brilliant single frigate engagements about this period that deserve description, if only space would allow. On 23rd April 1794 there was a frigate battle-royal off Guernsey between five British and four French frigates. The British were under Sir John Warren, one of whose ships was the "Arethusa," 38, commanded by Captain Sir Edward Pellew, who in the "Nymphe," 36, ten months earlier, boarded and captured the 36-gun frigate "Cléopâtre" after a desperate conflict. It was for this action that the gallant captain received his knighthood. The result of the Guernsey fight was that three of the Frenchmen were captured, viz., the "Engageante," "Pomone," and "Babet." British arms were meeting with success in the West Indies.

British arms were meeting with success in the West Indies. We had failed to reduce Martinique in 1793, but on 5th February 1794 Vice-Admiral Sir John Jervis and General Sir Charles Grey arrived to recommence operations against the island. The general and admiral were in complete accord concerning the methods of attack, and between them achieved the desired success. First a landing was effected and the very strong Fort Bourbon was captured, and Fort Royal fell after a determined attack by land and sea. With the forts and the French ships in the harbour in our possession, the town of St Pierre could only submit, and General Rochambeau surrendered the whole island. In April we captured St Lucia, and in July Guadeloupe fell to us.

Returning to the situation in the Mediterranean, Hood and



GEORGE III PRESENTING A SWORD TO LORD HOWE ON BOARD THE "QUEEN CHARLOTTE" AT SPITHEAD, JUNE 1794 (Reduced Engraving from the Painting by H. P. Briggs, R.A., in the Gallery of Greenwich Hospital)

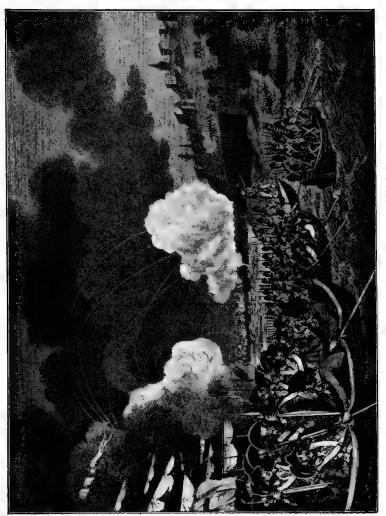
Nelson were still there in 1794. In Corsica was a party under Paoli who desired to throw off the yoke of the Republic, whose forces held San Fiorenzo, Bastia, and Calvi. Hood decided to help Paoli against the Republicans, but General Dundas, in command of the land force that was aboard the fleet, declined to assist until he could obtain reinforcements from Gibraltar, and his successor also refused to aid what he termed was a rash and visionary attempt. Lord Hood, therefore, determined to undertake the task with seamen and the troops that figured on the ship's books as marines. He commenced the seige of San Fiorenzo with 1183 soldiers and marines, 250 sailors and a few artillerymen he had managed to obtain. This force was landed on 4th April under Lieutenant-Colonel Villettes and Nelson, who could now boast the army title of brigadier. The sailors dragged the guns up almost impossible heights, and the soldiers became infected with some of the spirit of the seamen, and in the end San Fiorenzo capitulated.

Bastia and Calvi were considered practically impregnable, but the former port surrendered on 22nd May. In the case of Calvi, Hood was favoured with the support of General Stuart now in command of the troops. Calvi fell on 10th August, and it was here that a shot struck the ground close to Nelson and drove some sand and gravel into his right eye, completely destroying

its sight.

France did not relish the loss of Corsica and commenced to prepare an expedition to recover it, but for its success it was first necessary to secure command of the water approach, and the Toulon fleet of 17 ships-of-the-line and 5 smaller vessels put to sea in March 1795. Lord Hood had returned to England and Admiral Hotham was now in command. He had 15 sail-of-the-line but they were little more than half manned, and to Hotham's 7650 men the French fleet possessed double. The hostile fleets met on 13th March, but the French were not anxious for an engagement. One of their ships, the "Ca Ira," 84 guns and 1300 men, in a collision with her next ahead had lost her fore and main topmasts. The "Inconstant" frigate exchanged shots with her but had to withdraw. The following day the "Ca Ira" was taken in tow by a frigate, while the "Sans Culotte," 120, and "Jean Barris," 74, kept about gunshot on her weather-bow.

Nelson bore down on the "Ca Ira," whose stern guns plied the "Agamemnon" with shot, scarcely one missing its mark. Seeing that his masts were in danger, Nelson, who had no assistance nearer than several miles off, changed his tactics. When within a hundred yards of the enemy's stern he caused the "Agamemnon" to fall off and gave the "Ca Ira" a whole broadside, and then stood after her again. This manœuvre was practised again and again, never allowing the Frenchman to get a single gun from either side to bear upon the British ship. At the end of two hours



CAPTURE OF MARTINIQUE, FEBRUARY 1794

the "Ca Ira" was practically a wreck, with 110 men killed and wounded. When the "Sans Culotte" and other ships were bearing down to assist their consort, Hotham signalled Nelson to rejoin the fleet. Although the "Ca Ira" and "Censeur," 74, struck their flags on the next day, Hotham would not pursue the enemy,



ADMIRAL CORNWALLIS KNEW HIS MEN (p. 305)

to the great dissatisfaction of Nelson, who avowed they could have captured the whole of the French ships, instead of only two, and the "Sans Culotte" forced to quit her fleet and retreat to Genoa.

Again in July Hotham showed a singular lack of energy. The "Victory" and "Culloden" attacked the "Alcide," 74, which struck, but only to blow up shortly afterwards. After a close

engagement in which only a portion of his ships joined, Hotham discontinued the action and the French put into Fréjus Bay. In the autumn Admiral Hotham returned to England, Sir Hyde Parker succeeding him, until Sir John Jervis could take up the command.

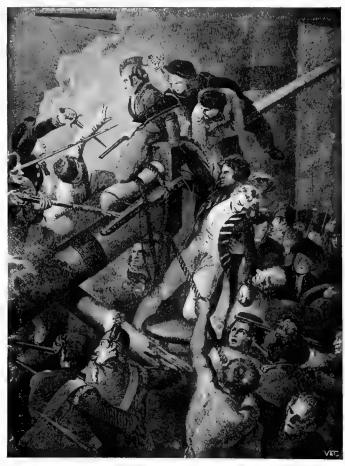
After Lord Howe's victory on 1st June 1744, Villaret Joyeuse gave our Channel squadron no further opportunity of meeting him. Early in 1795 Lord Howe resigned the command owing to ill-health, and was succeeded by Viscount Bridport. In May Vice-Admiral Cornwallis with five ships-of-the-line sighted a French squadron under Admiral Vence, whom he chased into Belleisle. Villaret Joyeuse, hearing of this incident, sailed from Brest with a force to join Vence, with the object of seeking out Cornwallis and attacking him. Meanwhile that officer had been convoying some merchant ships, and when he returned to his station found Joyeuse with a squadron of 12 sail-of-the-line, a force that left Cornwallis no option but to retreat. The French gave chase and damaged the "Mars" aloft, so that she was in danger of capture until the "Royal Sovereign," IIO, dropped back to her aid. This laid both ships open to the attack of the full French squadron, which would have been disastrous, but a clever stratagem extricated Cornwallis out of the difficulty. During the night he detached the frigate "Phaeton" to signal to him that a ship was in sight, and then a squadron. Joyeuse, reading these faked signals, concluded that assistance was coming to Cornwallis and forthwith gave up the chase, and the British admiral at once set out to find Lord Bridport and inform him that the French were at sea.

Lord Bridport, however, discovered the fact himself, for Joyeuse, when making for Brest, fell in with the British fleet of 14 sail-of-the-line. The French promptly steered for Lorient, the nearest port, with Lord Bridport in full chase, who came up with the enemy early on the morning of 23rd June. The "Irresistible" engaged "L'Alexandre!" (formerly our own "Alexander," which the French had taken from us), and when the "Orion" came to aid her opponent, "L'Alexandre" struck. The "Queen" and "London" similarly overpowered the "Tigre" after the "Sanspareil" had pursued and brought her to action. The "Queen Charlotte" closely engaged the "Formidable" which struck her colours, when she had lost her mizen-mast and had been set on fire. The "Queen Charlotte" was in a very battered condition, but as she dropped astern, usefully poured a broadside into "L'Alexandre," which proved the last blow necessary to cause her surrender to the "Irresistible" and "Orion."

By this time Lord Bridport found himself so close into land that he discontinued the action, a decision that was open to criticism, for he was in a position to inflict a far heavier defeat upon the enemy. Our losses were 31 killed and 113 wounded; the "Queen Charlotte," for example, lost 4 men killed and 32 wounded, but of the 13 losses on the "Sanspareil" II of the men were killed outright, while the wounded were a couple of midshipmen. In the three ships we captured there were 600 killed and wounded, showing that the French defence had been most obstinate, and indicating that their general losses must have been very heavy.

Although France was meeting with little success on the sea, her arms were proving victorious on land, and in the winter of 1794-5 she conquered Holland when the canals were all frozen. We had rendered the Dutch some assistance in this campaign, and in our Duke of York's land force was Lieutenant Arthur Wellesley, afterwards Duke of Wellington. When Holland passed under the dominion of France, she became our enemy; we declared war against her in 1705 and set Admiral Adam Duncan to watch for any movement of her fleet. We also decided to attack the Cape of Good Hope, which the Dutch had held for 143 years. Vice-Admiral Sir George Keith Elphinstone set sail with a squadron of three 74's, two 64's, and two 16-gun sloops; on board was a military force of 500 under Major-General Craig. In August we took possession of Simon's Town, but the Dutch militia, occupying the heights behind, offered a gallant defence. Elphinstone landed 350 marines and 1000 sailors, but before this force could get to work, our two 64's and the sloops stood in close to land, and with a heavy fire drove the enemy from the heights. In later fighting ashore, the brunt of it fell on the sailors, who won General Craig's warmest praise. Eventually the Dutch Governor-General, Shuyshen, surrendered with 1000 regular troops. For continuity's sake, although it is anticipating a little, we may as well give the conclusion of the struggle at the Cape. In August of the following year a Dutch squadron of nine sail put into Saldanha Bay; it had been sent to assist the colonists but arrived too late. The Dutch Admiral found himself completely trapped between Elphinstone's stronger ships on one side and a large land force on the other. position of the Dutch was hopeless, and the nine ships, together with nearly 2000 sailors and soldiers, were surrendered without any attempt at resistance. In the West Indies in 1795 matters were not very flourishing. We obtained a victory over the French at Dominica, but at Grenada and St Vincent we were only partially successful, while we were forced to abandon St Lucia. In 1796, however, we not only recovered the last-named, but also reduced the settlements of Demerara, Essequibo and Berbice, belonging to the Dutch. If the West Indian waters witnessed no naval engagement of outstanding importance, there were numerous frigate engagements for which the British ships had earned world-wide fame. Some of the exploits of the commanders of these lesserarmed, but fast-sailing ships, were daring to the verge of impudence. Captain Robert Faulknor of the 32-gun frigate "Blanche"

did some specially good work in his small ship in the West Indies, and one incident is well worthy of record. Inside the harbour of Pointe à Pitre, Guadeloupe, lay the French frigate "Pique," and outside were the "Blanche" and the "Quebec," waiting for the



DEATH OF CAPTAIN FAULKNOR

enemy to put to sea. On 2nd January 1795, the "Quebec" sailed away, leaving Faulknor to keep the vigil alone. The French captain, Conseil, however, made no attempt to come out, doubtless fearing that the "Quebec" was within sound of guns, and would reappear if the "Blanche" and "Pique" came to an engagement.

On the 4th an American schooner from Bordeaux with a cargo

of wine put in an appearance, and Faulknor was not long in effecting her capture. The French captain could not allow Faulknor to take off his prize without making some attempt at rescue, and consequently the "Pique" came out and fired a few shots at long range. The Frenchman was afraid to get to close quarters lest the "Quebec" should reappear; but as by midnight there was no sign of her Conseil determined to attack the "Blanche" without delay. For an hour or more the two vessels broadsided each other vigorously as they ran before the wind, separated by not more than a hundred yards.

Eventually the "Blanche's" main and mizen-masts went over



SIR SIDNEY SMITH

the side, and while she was in this predicament the "Pique" ran foul of her. Faulknor determined to keep the enemy there, and ordered the "Pique's" bowsprit to be lashed to the capstan. While the gallant English captain was passing the rope with his own hands, a French seaman shot him through the heart from only a few yard's range.

The rope not being yet fast, the "Blanche" fell off before the wind, and the "Pique" fouled her on the other side, and at the second attempt the enemy was securely lashed. The Frenchmen made desperate efforts to cut the lashing, but a hot

musketry fire prevented the achievement of their purpose.

Mr Watkins, the first lieutenant, could have made short work of the enemy, if the "Blanche" had been provided with stern ports. There was no time to cut them out, so he fired two of his guns through his own stern, and thus made two extemporised ports, having men at hand with fire buckets to put out the flames caused by the shot. With a couple of 12-pounders raking the "Pique" with deadly effect, it was not long before her masts fell, one after the other; and after enduring a murderous fire for two hours the Frenchmen hauled down their flag. Captain Conseil was dying; 76 officers and men were killed and IIO wounded, out of a crew of 300. On the "Blanche" there were 8 killed (including Captain Faulknor) and 21 wounded.

In 1795 Sir Sidney Smith, on the "Diamond," 38 guns, disguised his ship and, not only reconnoitred a French port where lay a fleet

under Villaret Joyeuse, but actually hailed one of his sail-of-the-line lying at anchor under jury masts, and asked, in French, if he could render assistance. A year later the "Diamond," with a 14-gun brig and a lugger, entered the port of Herqui on the northern coast of France, and cut out a 16-gun corvette and 8 smaller vessels from under the very guns of the batteries. In a subsequent venture Sir Sidney paid for his daring by capture and imprisonment for two years in the Temple prison, Paris, but from which he contrived to escape in good time to upset Bonaparte's plans to capture Acre.

CHAPTER XV

BATTLES OF ST VINCENT AND CAMPERDOWN

Before the end of the year 1796 Britain was confronted by a crisis almost as bad as the one of sixteen years earlier, for Spain, whose alliance with us had proved of little assistance, made peace with France and joined in opposition to us. Once more we had to contend with the joint strength of France, Holland, and Spain, once more we were called upon to expend wealth and blood, not only to keep our flag flying on the seas, but to prevent foreign troops from invading our shores. Although in our numerous naval engagements with the French we had been successful in most of the encounters, we had not inflicted on the enemy a single disastrous defeat, for even on the Glorious First of June we only captured six ships and sank one out of a fleet of twenty-six. The French fleets remained distinctly formidable, and the country was wealthy and powerful, with immense resources at her disposal, as shown by the despatch of 20 sail and 18,000 troops to Ireland in December. The effort proved unsuccessful, largely owing to the dispersal of the fleet by One large ship, the "Droits de l'Homme," was afterwards brought to action by a couple of British frigates and was driven ashore with a loss of 400 men. Altogether in this expedition the French lost 5000 men-killed, drowned, or wounded.

Possibly Spain threw in her lot with France largely in the hope of recovering Gibraltar, but it was an incident at the beginning of the war that had given her an additional grievance against us. A Spanish treasure galleon had been captured by a French privateer, and captor and prize in turn were taken by a British squadron under Admiral Gell. As Spain at that time was our ally and the owner of the treasure ship, we might very well have yielded it up to her, instead of which it was adjudged a lawful prize to its last captors. This decision caused no little bitterness in Spain, which France doubtless worked on for her own ends, and now all the Spanish ports were alive with preparations for revenge on perfidious Britain.

In one respect there were no complications in our position: we could look for no support from any other power, and the Navy, and only the Navy, could uphold us in our splendid isolation. We knew practically the exact intentions of our enemies, whose plans



'LES DROITS DE L'HOMME " DRIVEN ASHORE

were calculated to make a clean sweep of us. The French fleet at Toulon would join with the Spanish fleet from Cadiz, which would assure a force sufficiently strong to smash up the British Mediterranean fleet at Gibraltar. This combined fleet would afterwards proceed to Brest and rout the British ships that were blockading that port, and then with a dash into the Channel, a descent upon Ireland would be an easy matter. Using Ireland as a base, the allies would be able to invade England and Scotland, and pull us off the proud pedestal where we had imagined ourselves secure.

For the safety of the British Isles it was imperative to prevent the junction of the French and Spanish fleets, and then to defeat them in detail, as well as the fleet of Holland. During the last year we had increased the men in our Navy by many thousands under the quota system (page 263), and the number employed now

totalled more than II2,000.

To Admiral John Jervis would be committed the task of tackling the Spanish fleet, and for this purpose his force was to be raised to 15 warships with which to meet the 27 ships under Don Josef de Cordova, a "tall order," even if the Toulon fleet did not complicate matters.

In the Mediterranean we had ceased to hold our own; the islanders of Corsica had declared for France, and Sir John Jervis was retiring to Gibraltar harbour, simply because he could not contend with the combined fleets of France and Spain. The withdrawal of our garrison from Corsica entailed the removal of men and stores to the island of Elba, which Jervis decided to retain. The evacuating operations the Admiral entrusted to Nelson, who was in command of the "Captain," 74, the "Agamemnon" ha ing returned to England to undergo extensive refit. Nelson accomplished his task and rejoined Jervis in order to proceed to Gibraltar. Upon arrival there, the admiral found awaiting him orders to evacuate Elba, which duty also devolved on Nelson, for Jervis had no officer upon whom he could more rely. A battleship could not be spared, so Nelson hoisted his broad pendant in the frigate "Minerve," and, with another frigate, the "Blanche," set sail on his mission on 14th December 1796.

By this time the Mediterranean was little more than a death-trap for a British ship, for it teemed with enemies. Only five days out, Nelson fell in with two Spanish frigates, one of which he captured and took in tow; and another Spanish frigate that put in an appearance was engaged until she hauled off. The firing, however, attracted a couple of hostile battleships, and Nelson abandoned his capture and went on his way to Elba. When he had sent off the garrison and stores in transports, the commodore, on the "Minerve," accompanied by the "Romolus," set out to rejoin Jervis. Instead of directing his course straight for Gibraltar, Nelson actually stood over to Toulon and remained there for a couple of

days, until he had ascertained that no French vessels were preparing for sea, after which he went on to Barcelona and from thence to Cartagena, where he found that the Spanish fleet had sailed. Nelson consequently made for Gibraltar without delay, in a perfect



NELSON FELL IN WITH TWO SPANISH FRIGATES, ONE OF WHICH HE CAPTURED

fever lest he should not be able to rejoin his admiral in time for the

expected fight.

Arriving at Gibraltar on 9th February 1797, Nelson learnt that Jervis had gone on to Cadiz, and he set out to follow a couple of days later. That same evening two Spanish battleships and a frigate, that had tracked the "Minerve," were gaining upon the British ship when one of her men fell overboard. In the circumstances it was

policy to leave the man to his fate, but no British commander was ever more solicitous for his men than Nelson, and the imminent danger did not prevent a boat being lowered in charge of Lieutenant T. B. Hardy, while the speed of the "Minerve" was checked. The man could not be found, and the boat could not catch up with the ship unless her speed was reduced still further, while the Spaniards were almost within gun-shot. "I'll not lose Hardy—back the mizen



"I'LL NOT LOSE HARDY-BACK THE MIZEN TOPSAIL," EXCLAIMED NELSON

topsail," exclaimed Nelson. The ship's way was stopped and the boat got aboard, thanks to the manœuvre puzzling the foremost Spanish ship, which also eased to allow a consort to come up. By the time the Spaniards realised the situation, the sails of the "Minerve" had filled, and she was quickly out of range.

Nelson sighted the British fleet on the 13th off Cape St Vincent; and, when he had joined, he visited Sir John Jervis and reported upon matters in the Mediterranean; and particularly pleasing to the admiral was the news that there was no immediate danger from

the Toulon fleet. He could enter with less anxiety into a conflict with the Spanish fleet, through the midst of which Nelson had

pushed on during the night.

A week earlier Admiral William Parker had joined Jervis with 5 ships of the Channel fleet, raising the number to 15 sail-of-the-line, with which to meet whatever force might be under the command of Don Joseph de Cordova. It was imperative, not only that Jervis should meet the Spaniards, but that he should defeat them signally. Scarcely ever in our history had a victory been needed more badly.



LORD ST VINCENT
(By Sir W. Beechey, R.A.)

"Great Britain's national position at that moment was fraught with the gravest peril; everywhere there was despondency and gloom; Consols had dropped to fifty-one; cash payments were about to be stopped at the Bank; Ireland was on the brink of rebellion; a French invasion expedition was under orders to sail."

Sir John Jervis was one of the most able and vigilant commanders, who had seen much service, since thirty-eight years earlier as a lieutenant he had commanded the brig "Porcupine," and had General Wolfe aboard with him before Quebec. The gallant sailor loved discipline and good gunnery above all things, and not a few of his commanders had been trained under his own eye. If Britain were forced to allow her fate to rest upon but fifteen battle-

ships, Jervis was the one man to take charge of the forlorn hope. On the night of Nelson's arrival, at a dinner-party on board the flagship "Victory," the breaking-up toast was, "Victory over the

Dons in the battle that they cannot escape to-morrow."

The next morning, St Valentine's Day, our look-out ships were making out the enemy and signalling their strength, as the haze cleared off to disclose the Spanish fleet. Eight sail-of-the-line were reported to Jervis, then twenty, and then twenty-five. "Very well, sir," was the chief's reply to the reporting officer, as he paced the quarter-deck. Finally the whole Spanish fleet was revealed, and Captain Calder once more reported, "Twenty-seven sail-of-the-line, Sir John; against such a force is it advisable to——"

"Enough, sir!" broke in the stern, blunt old admiral, "if

there are fifty sail-of-the-line, sir, I'll go through them."

Admiral Don Joseph de Cordova's flagship was the "Santissima Trinidad," a huge 4-decker of 130 guns; six other ships were 112's, two 80's, and the remainder 74's. All told, the Spaniards possessed 1000 guns more than the British. Don Joseph had received a report that Jervis's ships numbered only ten, and when the Spaniards descried a force of fifteen, they jumped to the conclusion that they were merchantmen, and thus held on their course in loose order, with the van squadron of half a dozen ships separated from the main body by quite eight miles.

It was very different in the British fleet, which, thanks to Nelson's news of the previous night, had been signalled to "Prepare for action"; and the commanders and crews were eager to get amongst the "complete forest of masts huddled together" standing on calmly for Cadiz. For a moment, review the ships and officers

about to venture against the enormous odds:

	Guns.	Officer in Command.
	100	Admiral Sir John Jervis
		Captain Robert Calder
		,, George Gregg
	100	
		Captain Thomas Foley
	98	Vice-Admiral Hon. W. Waldegrave
		Captain J. Richard Dacre
"	98	Rear-Admiral William Parker
		Captain John Irwin
	98	" James H. Whitshed
	98	" Thomas L. Frederick
	74	Commodore Horatio Nelson
		Captain Ralph N. Miller
	74	" Sir C. H. Knowles
	74	" Cuthbert Collingwood
	74	" Sir James Saumarez
	 	100 100 98 98 98 98 74 74 74

Ship.	Guns.	Officer in Command
" Colossus	· 74	Captain George Murray
" Egmont "	• 74	" John Sutton
" Culloden "	· 74	" Thomas Troubridge
" Irresistible	· 74	,, George Martin
" Diadem "	. 64	,, George H. Towry

The frigates were the "Lively" (Captain Lord Garlies), "Niger" (Captain Edward J. Foote), and "Southampton" (Captain James

Macnamara); two 18-gun sloops and a cutter.

The disposition of the Spaniards caused Jervis to determine to cut off their six ships in the van, which at half an hour before noon were still three miles away from their main body. The British ships hoisted their colours and the "Culloden" led the attack, having to pass between two big Spaniards with almost a certainty of collision. Troubridge held on his way until his men could look into the port-holes of the nearest 3-decker. In rapid succession, at only a few yards' range, the "Culloden" hurled into the enemy a couple of double-shotted broadsides, that worked terrible havoc and threw the Spaniards into a panic. Not expecting an attack on that side, their guns were not cleared for action and could not reply with a single shot, and Troubridge passed triumphantly through the line.

The splendid understanding between Jervis and the subordinates of his own training was exemplified when the "Victory" immediately signalled for all the ships of the fleet to tack in succession after the "Culloden." In the moment of his preliminary success Troubridge knew that the order would come, and with the flags "stopped" (the bunting rolled up in tight rolls) at his masthead, he had the answering signal ready to flutter out within two seconds

of Jervis's signal being hoisted.

Jervis was a proud man when he perceived Troubridge's dashing promptitude. "Look, look at Troubridge," cried the stern old veteran. "He manœuvres as if the eyes of all England were on him. Would to God they could see him to be what I know him,

and what, by heavens, sir, the Dons will soon feel him."

As the British ships followed in the wake of the "Culloden," receiving in turn the fire of the Spanish ships, the "Colossus" was badly damaged by the Spanish lee division, which had neared the British line. Being unable to tack like her predecessors in the line, she was laid open to the onslaught of the leading Spanish 3-decker; and was faring ill until the "Orion" came to her assistance and the "Minerve" took her in tow.

When the battle was an hour old, the "Principe de Asturias" endeavoured to cut the British line ahead of the flagship, but Jervis anticipated the intention, and emptied a tremendous fire into the Spaniard that completely frustrated the attempt; and

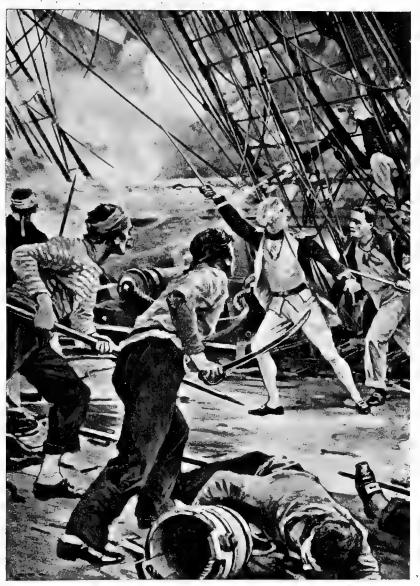
a few minutes later the "Victory" was raking the remaining ships of that division with a destructive fire, that caused the squadron to wear round and bear up, so that only one of its ships was able to join the weather division.

Now occurred a brilliant movement by Nelson, who was thirteenth in the line and had not yet fired a shot. With the intuition of genius he perceived that by the time our long line of ships had carried out the evolution, the head of the Spanish main body would be clear of the rear of Jervis's line, and would be able to work round to join that portion of their fleet which was cut off. Ignoring the signal which still flew from the flagship, Nelson wore round the "Captain" out of line and, crossing the bows of three of his consorts, threw his ship in the path of the huge "Santissima Trinidad" and engaged her until Troubridge brought up the "Culloden" to his relief; when the "Captain" was steered into the middle of the enemy to find as many as four or five antagonists at the same time. Seeing the tremendous odds against the commodore, Jervis signalled the "Excellent" to tack and support him. Let Collingwood describe his part:

"Making all sail and passing between our line and the enemy we came up with the "San Nicolas" of 80 guns, which happened at the time to be abreast of the "San Josef" of II2 guns. We did not touch sides, but a bodkin could not have been put between us, so that our shot passed through both ships; and in attempting to extricate themselves they got aboard each other. My good friend the Commodore (Nelson) had been long engaged with these ships, and I happily came to his relief, for he was dreadfully mauled."

The "Captain," indeed, needed assistance. In Nelson's own words, "she had lost her fore-topmast; she had not a sail, shroud or rope which was not shot away." Collingwood having silenced the "San Nicolas" and "San Josef," went off to find another foe, while Nelson, notwithstanding the crippled state of his ship, resolved to board the "San Nicolas," with which he allowed the "Captain" to collide. How the fiery commodore boarded first the "San Nicolas" and then the "San Josef" cannot be described better than by Nelson himself, allowing ourselves a few emendations for the sake of brevity.

"The soldiers of the 69th (doing duty as marines), with an alacrity which will ever do them credit, were almost the foremost on this service. The first man who jumped into the enemy's mizen chains was Captain Berry, late my first lieutenant (Captain Miller was in the very act of going also, but I directed him to remain); he was supported from our spritsail-yard, which hooked in the mizen rigging. A soldier of the 69th Regiment, having broken the upper quarter gallery window, I jumped in myself, and was followed by others as fast as possible. Having broken open the fastened cabin-doors, the soldiers fired, and the Spanish brigadier



NELSON BOARDING THE "SAN JOSEF"

fell as he was retreating to the quarter-deck, where I found Captain Berry in possession of the poop, and the Spanish ensign hauling down. I passed along the larboard gangway to the forecastle, where I met two or three Spanish officers, prisoners to my seamen; they delivered their swords.

"A fire of pistols or muskets opening from the admiral's stern

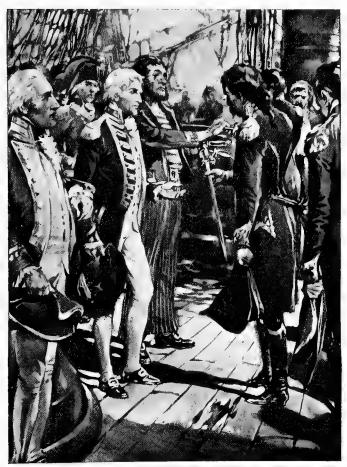


THE SOLDIERS FIRED INTO THE STERN GALLERY

gallery of the "San Josef," I directed the soldiers to fire into her stern; and calling to Captain Miller, ordered him to send more men into the "San Nicolas," and directed my people to board the first-rate, which was done in an instant, Captain Berry assisting me into the main chains. At this moment a Spanish officer looked over the quarter-deck rail, and said they surrendered . . . and on the deck of a Spanish first-rate, extravagant as the story may seem, did I receive the swords of the vanquished Spaniards . . . thus fell

these ships. The 'Victory' passing, saluted us with three cheers, as did every ship in the fleet."

Among all the stirring incidents recorded in the annals of British naval warfare there is nothing more striking than Nelson on



NELSON RECEIVING THE SWORDS OF THE SPANISH OFFICERS

the quarter-deck of the "San Josef," receiving from the Spanish officers, one by one, their swords, which in turn the commodore passed to William Fearney, a seaman standing by his side. This weather-beaten, scarred old tar tucked the trophies under his arm as he received them, as unconcernedly as if he were collecting a bundle of old walking-sticks. And throughout the British fleet,

where some of the ships were still in action, jocular remarks were being passed concerning "Nelson's patent Bridge for Boarding First-Rates," in allusion to his boarding the II2-gun "San Josef"

by way of her 80-gun sister in adversity.

Nelson's unexpected move in wearing out of line caused utter confusion in the Spanish fleet, enabling our foremost ships to come up, that the action might become general. The "Culloden" dropped astern, disabled after her encounter with the Spanish flagship, for previously Troubridge had suffered severely under a heavy fire from the rear Spanish ships. The "Blenheim," "Prince George," and "Orion" engaged the "Salvador" and "San Ysidro," 74's, and handled them so severely that they dropped astern, when the "Excellent" hammered the latter until she surrendered, and similarly the "Salvador" struck to the "Orion."

As it was now past four o'clock and the detached Spanish vessels were closing up to their main body, Jervis decided to end the action and to cover his prizes and disabled ships and form a line in the wake of the "Victory"; while Admiral de Cordova

made off towards Cadiz.

Our total loss at the battle of St Vincent was only 74 killed and 227 wounded, chiefly aboard the "Captain," "Blenheim," "Culloden," and "Excellent," which four ships alone accounted for 58 of the killed and 164 of the wounded. Among the latter was Nelson, who received a contusion in the groin from which he never fully recovered. The Spaniards suffered severely, judging by the state of their four captured ships alone. The "Salvador" had 160 men killed and wounded; "San Ysidro," 93; "San Josef," 140; and "San Nicolas," 200. The "Santissima Trinidad" lost 200 killed and wounded. The 4-decker lost her fore and mizen masts and her guns were silenced; and indeed she was on the point of striking to the "Orion," when the Spanish lee division and several other ships rescued her.

It is related that when Nelson presented himself on board the flagship, Sir John embraced him and refused to accept the sword of the Spanish Vice-Admiral. "Keep it," he said, "it justly belongs to you, who took it from your prisoner." Captain Calder ventured to remark that Nelson's evolution was disobedience of orders, to which the veteran admiral sarcastically replied: "I saw it, and if ever you commit such a breach of orders depend upon it

you shall be forgiven."

Although this memorable battle was not attended with many captures, it had the very important result of demonstrating the inefficiency of the Spanish fleet and that the alliance of Spain with France was not of the grave importance we had feared. Only a bold and skilful leader, with implicit trust in those officers who served him, would have dared with only 15 sail-of-the-line to run into the midst of 27. If the Spaniards were in confusion at the

commencement, they were still more so during the course of the action. Their ships were so huddled together that if a shot did not strike one, it was almost certain to strike another, and many of the ships were unable to fire at all without firing, which they generally did, into their comrades. All this disorder infused additional confidence into the British, and they rattled through the business more as if it were a game of harmless sport, than one in which the hazard thrown was for life or death.

The victory had a magical effect in England. From almost the depths of despair the nation arose exultingly, for once again in our history our strong right arm, the Navy, had struck the enemy, and had struck home. We had, indeed, been on the verge of seeking to make peace, but now, although we were threatened in various quarters, we were heartened afresh. So long as fifteen British ships could dash among twenty-seven and snatch out four of the biggest and pummel the rest, we need not be downcast. "It was enough," as Captain Mahan says, "to hear that the crew of one British 74, headed by a man whom few out of the Navy yet knew, had, sword in hand, carried first a Spanish 80 and then another of II2 guns. With such men to rule the fleet, and with Pitt at the helm of State, we thanked God and took courage."

A grateful country bestowed various rewards upon the men who had figured prominently in the great victory. Sir John Jervis received a peerage under the title of Earl of St Vincent; Vice-Admiral Thompson and Rear-Admiral Parker received baronetcies, and Commodore Nelson was made a Knight of the Bath. Within a week after the battle he was advanced to the rank of rear-admiral, being then only thirty-eight and a half years of age. The sword of the Spanish Rear-Admiral Nelson presented to the mayor and corporation of Norwich. The "San Josef" was broken up in 1849; her figure-head is still preserved at the Deptford Victualling Yard. Just as the "Captain" steered alongside the "San Nicolas" \H two bells \H sounded, and the bell is at \H evonport Dockyard, where for more than a century it rang the yard hands to their meals; and at Devonport, too, are two brass cannon from the "Captain" that vomited splintering shot on the enemy on that glorious St Valentine's Day.

Spain dealt out no rewards, but condign punishment, to the officers of the fleet. Cordova was declared utterly incapable, was forbidden to appear at Court, and was banned from even visiting the chief ports. Count Morales, second-in-command, and various senior captains were cashiered and their swords broken; other captains were suspended for varying periods; and a number of lieutenants were reprimanded publicly and fines exacted from them

Spain was beginning to pay dearly for her crass stupidity in taking up the cause of a country that at heart bore her no good-

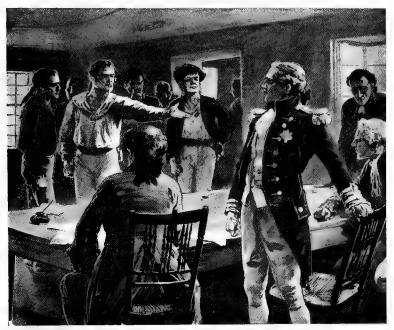
will. Three days after her defeat at St Vincent she lost the island of Trinidad in the West Indies, which fell to Rear-Admiral John Harvey, with five line of battle-ships and a force of troops under Sir Ralph Abercromby. On this occasion the Spanish Navy suffered another blow, for four of her ships-of-the-line were destroyed by their own crews, while we captured a fifth. Trinidad had been a Spanish possession for centuries, except for a couple of breaks, and now she had lost it for good.

The British nation had scarcely recovered from its jubilation over the great victory off Cape St Vincent, when it received a violent surprise. Our home fleet was in a state of mutiny. It seemed unbelievable, but nevertheless was a fact. The disciplinary methods employed in the fleet, however severe and brutal, had little or nothing to do with the outbreak; the seamen did not even ask for the abolition of flogging. Their pay had not been raised since the days of James II, and now they asked for an increase of about 3d. a day, not for themselves, nearly so much as for their wives and families ashore. They desired better food and 16 ozs. to the pound instead of 14 oz., at which the sailor's pound was fixed. They asked for more humane treatment of wounded men, and no deductions of pay for the time spent in the sick bay; and an occasional day ashore was a very prominent plank in the desired reforms. They had petitioned for a redress of their grievances in February, but nothing having come of it, they mutinied on 15th April. The Government promptly came to their senses and promised to accede to all just and reasonable demands, while a free pardon was granted

to the fleet generally, and included even the ringleaders.

But the trouble was not at an end. The seamen did not understand the formal delays involved in passing the parliamentary votes for money to provide the increased pay. They thought they were being fooled, and in May the red flag was hoisted afresh. The Government sent Lord Howe down to Portsmouth, where the sailors on the "London" had disarmed their officers, on account of a lieutenant shooting a mutinous seaman. "Black Dick" speedily got the men into a contrite mood; they loved and esteemed the veteran, and they accepted his word that their grievances would be redressed. He promised that quite a large number of tyrannous officers should be removed. At the Nore trouble had recurred under the leadership of a bad character, Richard Parker, who caused the "Inflexible" to fire on a vessel, where a court-martial was sitting; and later he instigated the flogging of some officers. Matters assumed a very serious aspect, when eleven ships-of-theline, about to sail for Holland, turned back and joined Parker. The Government in two days passed Bills authorising the utmost penalties of the law, not only on the mutineers, but also those who actively sympathised with them. Parker hanged the Prime Minister and the First Lord of the Admiralty in effigy at the vardarm of the "Sandwich"; but on roth June two ships hauled down their red flags. The "Sandwich" fired on them, but shortly the other ships deserted the ringleader, and the officers and crew of the "Sandwich" gave up Parker to the authorities. On the 29th he was hanged on board the ship, where he had disgraced the fleet, and even jeopardised the safety of the country.

The disaffection spread to some of our ships on foreign stations. Lord St Vincent experienced trouble in the fleet then off Portugal.



THE MUTINY AT THE NORE-PARKER AT THE HEAD OF A DEPUTATION

He dealt with the outbreak very promptly. The ringleaders who were on the "St George" were seized and hanged at the yardarm the next morning. On the Cape of Good Hope station, similar severity by Admiral Thomas Pringle soon restored the crews to discipline and sober sense.

One is reminded how Cornwallis once stopped a threatened mutiny aboard the "Canada." There had been some accidental delay in the payment of the men's wages, and they declared in writing that they would not fire another gun until they were paid. The admiral knew his men. "My lads," he said, "you cannot be paid until we return to port. As to your not fighting—I'll clap you alongside the first large ship of the enemy we meet, and then

the devil himself cannot keep you from it." The breezy answer tickled the tars; they recognised the implied compliment; and the difficulty was at an end.

There was one admiral in particular who had little need to



NELSON TOOK A PROMINENT PART IN THE TERRIBLE HAND-TO-HAND CONFLICT THAT ENSUED

fear the mutinous spirit that was abroad. Nelson always secured the affection and respect of the men who served under him. When he was promoted to rear-admiral in March he transferred his flag from the "Captain" to the "Theseus" and took Captain Miller with him. One night a paper was found on the quarter-deck.

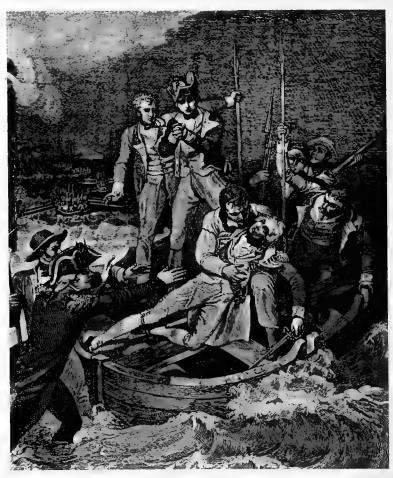
It was signed "Ship's company," and ran, "Success attend Admiral Nelson! God bless Captain Miller! We thank them for the officers they have placed over us; we are happy and comfortable, and will shed every drop of blood in our veins to support them, and the name of the 'Theseus' shall be immortalised as high as the Captain's." There was the true British spirit, that permeated the greater part of the fleet; or never would our old wooden walls so oft have thundered their way to victory.

When Lord St Vincent had refitted his victorious squadron in Lagos Bay he strictly blockaded Cadiz until July, Sir Horatio Nelson commanding the inshore squadron close to the port. As Massaredo, the new Spanish admiral, would not venture out, Nelson was given the task of bombarding the town and fleet with one bomb-vessel, one gun-boat and all the barges and launches of the fleet, armed with carronades and fully manned. The bomb-vessel threw her shells with great effect, until her 13-inch mortar was injured. The Spanish commodore, Don Miguel Tyrasin, then came out with his boats, and in the terrible hand-to-hand conflict that ensued Nelson, as usual, took a prominent part. His barge, manned by ten oarsmen, was attacked by Tyrasin in a boat with a crew of twenty-six. It was a battle-royal between the Spanish commodore and the British admiral. The Spaniards' attempts to board the barge Nelson declared were the hottest in his experience. Twice our heroic admiral escaped death by a miracle; and once even his practised swordsmanship would have failed to save him had not John Sykes, his coxswain, "an old Agamemnon," interposed his own head to receive a sabre-cut meant for his beloved leader. In the end, however, 18 out of the 26 Spaniards were killed, and Tyrasin surrendered his sword to the illustrious victor; and Nelson got away with 3 barges captured and 100 prisoners. Two nights afterwards Nelson led a similar attack and worked considerable damage to the port and fleet. Our total losses in both these ventures were only 4 killed and 40 wounded.

Lord St Vincent next despatched an expedition against Santa Cruz in Teneriffe, one of the Canary Islands, the scene of Robert Blake's last desperate adventure a hundred and forty years earlier. Nelson, with his flag in the "Theseus," was accompanied by two other 74's, the "Culloden" and "Zealous," together with three frigates and a cutter. On the night of 24th July the boats of the squadron, carrying a thousand men, started for the Mole, only to find a large force of the enemy in readiness to receive them. When on the point of landing Nelson was severely wounded in the right arm by a grape shot, but it did not prevent him from going to the help of the crew of a cutter then struggling in the water.

Meanwhile Troubridge had effected a landing south of the Mole, and with less than 400 men fought his way into the great square of the town, where he expected Nelson and his force to join

him. Finding that he was not to be supported, the enemy's artillery commanding every avenue of escape, and the whole garrison about to attack him, Troubridge sent a flag of truce to the governor



NELSON WAS SEVERELY WOUNDED IN THE RIGHT ARM BY A GRAPE SHOT

offering terms. The gallant commander of the "Culloden" threatened to burn the town unless he and his party were allowed to return to their ships, but undertaking not to molest the island further. The governor agreed, and thus our attack on Santa Cruz ended in failure and cost Sir Horatio Nelson an arm, which had to be amputated upon his return to the "Theseus." Nelson and his

squadron rejoined Lord St Vincent on 16th August, and four days later the maimed hero was on his way to England, afraid that his naval career was at an end.

The Dutch had long been desirous of sending a squadron to join the French fleet at Brest, but their fifteen ships could not leave the Texel while Admiral Adam Duncan still kept up his tireless blockade. At one time his force was reduced to his flagship, the "Venerable," 74, and one other, but by artfully signalling to purely imaginary consorts, he kept the Dutch at home until his reinforcements actually arrived, and the blockade was kept up all through the summer. In October Duncan was forced to sail to Yarmouth for provisions and to effect some repairs, leaving only five ships to keep watch on the Texel. The Dutch admiral, De Winter, seized the opportunity to put out to sea. A British lugger promptly conveyed the news to Yarmouth and Duncan at once set out to find the enemy.

The British North Sea fleet consisted of seven 74-gun ships and seven 64's, the second-in-command being Vice-Admiral Richard Onslow in the "Monarch." The Dutch fleet consisted of fifteen ships, viz.: four 74's, five 68's, two 64's, one 58, two 56's and one 50-gun ship. Admiral De Winter, who flew his flag in the "Vryheid," also had two large frigates, carrying 44 heavy guns, which fought in the line of battle. The Dutch were superior to us by about 80 guns, while we had the advantage in men by about 1100. On the

whole the two forces were remarkably well matched.

On the morning of 11th October Duncan found the Dutch formed in line off Camperdown, although De Winter did not desire an engagement, his instructions being to join the Brest fleet in readiness for a joint invasion of Ireland. Duncan was in no two minds what to do: he hoisted the signal to pass through and engage. The "Monarch," leading the lee division, cut through the Dutch line between the "Jupiter" and "Haerlem" and engaged closely with the former, while the "Powerful," the next astern, tackled the "Haerlem."

Admiral Duncan desired to engage the "Vryheid," but the "States General" intervened and thwarted him, so the British admiral took his revenge on the latter by passing astern of her and delivering a destructive broadside that necessitated Admiral Storey bearing up and quitting the action. The "Venerable" then brought the "Vryheid" to action to leeward while the "Ardent" engaged her to windward, but the "Brutus," 74, "Leyden," 68, and "Mars" frigate, 44, came to the aid of De Winter. The battle between the two flagships was one of the most stubborn on record. "More than once every flag that Duncan hoisted was shot away," says Yonge, "and at last one of her men, named James Crawford, nailed the admiral's colours to the stump of the main topgallant mast." The crew of the "Vryheid" exhibited the most bull-dog determina-

tion, enduring not only the cannonade of the "Venerable" but also the "Ardent" on the other side, while the "Triumph" and "Director" raked her bows with deadly effect. Not until her masts had gone over the side and no men were left to work the quarter-deck guns, while he alone stood on the upper deck, did the gallant De Winter himself haul down the colours. He had proved himself a worthy successor of Tromp and De Ruyter, and he had the consolation of knowing that his British adversaries applauded his devotion.

The battle raged with great fury, resembling the old-time fights in which Blake had led us to victory against the Dutch. The "Triumph" and "Bedford" between them mauled the "Wassenaer" until she struck. The "Hercules," 74, took fire, but her crew extinguished the flames, and then surrendered because they had thrown all their powder overboard. Some of the Dutch ships got away quite early in the action, which threw a heavier burden on De Winter than he should have been called upon to bear. Five more ships, "Jupiter," 74, "Devries," "Gelykheid," and "Haerlem," 68's and "Delft," 56, and a couple of frigates surrendered in addition to those already mentioned. The "States General" had surrendered, but as the British ships appeared to be busily occupied in pounding at others her colours were rehoisted; and she contrived to get away, as a gale was coming on and Duncan did not detach any ships to pursue. When De Winter came aboard Duncan's flagship to give up his sword, the British admiral refused to accept it, saying that he preferred to take the hand of a brave man.

The British prizes were nine ships out of a total of fifteen; and some of those that escaped were so battered that they were no longer serviceable. We did not lose a ship, but their hulls testified to the severity of the fight, as did the condition of our prizes, which generally were so riddled as to be scarce worth towing to port. Our losses in men were 203 killed and 622 wounded. The Dutch

lost 540 killed and 620 wounded.

Admiral Duncan's victory practically destroyed the Dutch Navy, and with Spain so heavily discounted at St Vincent our fears of invasion were removed for the time being and we could devote almost undivided attention to the French. That King George III recognised the meaning and value of the battle of Camperdown was shown by His Majesty going down to the Nore on the return of the "Venerable" with her prizes. There were honours without stint for the victors. The admiral became Baron Duncan of Lundie, and Viscount Duncan of Camperdown; Vice-Admiral Onslow was made a baronet; Captain Fairfax and Trollope received knighthoods, and all the first lieutenants were raised to the rank of commander. Parliament voted thanks to officers, seamen, marines; gold medals were conferred on the captains; and the city of London

presented Lord Duncan with a sword valued at 200 guineas, and Sir Richard Onslow with one of the value of 100 guineas.

On the night when the news of Camperdown was made public in London, the ringleaders of a mob knocked violently at a door in Bond Street and demanded to know why the house was not



DUNCAN REFUSED TO ACCEPT DE WINTER'S SWORD, SAYING THAT HE PREFERRED THE HAND OF A BRAVE MAN

illuminated in honour of Duncan's victory. When the mob was told that Admiral Nelson lay there ill of the wounds he had received at Santa Cruz, the racket was hushed and the house no more molested. Nelson's sufferings from his lost limb were long and painful, but about the end of November it suddenly began to heal.

The gallant admiral had received many honours since his return to England. His steady friend, the Duke of Clarence, and the First Lord of the Admiralty, addressed to him letters of congratulation on his return, covered as he was with glory. The freedom of the cities of London and Bristol were conferred upon him. He was invested with the Order of the Bath and received a pension of £1000 a year. For this last as a matter of form he had to supply the authorities with details of the services he had rendered.

He had been in four actions with the fleets of the enemy, and in three actions with boats employed in cutting out of harbour, in destroying vessels, and in taking three towns; he had served on shore with the army four months, and commanded the batteries at the sieges of Bastia and Calvi; he had assisted at the capture of seven sail-of-the-line, six frigates, four corvettes, and eleven privateers; taken and destroyed near fifty sail of merchant vessels; and actually engaged against the enemy upwards of a hundred and twenty times; in which service he had lost his right eye and arm, and been severely wounded and bruised in his body."

Nelson had not been in England since he lost his eye at Calvi, and when his health was established he paid a visit to the Admiralty office to receive a year's pay as smart money. He was greatly irritated to find that payment was refused until he produced a medical certificate that the sight was actually destroyed. He procured the required medical testimony concerning the eye and also a certificate vouching for the loss of his arm, for he said they might just as well doubt the one as the other. On his return to the office, the clerk observed that he expected the claim would have been a bigger amount. "Oh!" replied Nelson, with grim humour. "This is only for an eye. In a few days I shall come for an arm; and in a little time longer, God knows, most probably for a leg."

CHAPTER XVI

THE BATTLE OF THE NILE

ALL through the winter of 1797 Lord St Vincent was keeping a look-out off Cadiz, and there early in 1798 Nelson, recovered from his wound, hoisted his flag in the "Vanguard," 74, the sixth of that name in the fleet, commencing with the one in which Sir William Winter fought against Medina Sidonia at Gravelines. It was common knowledge that the French were fitting out a powerful fleet at Toulon; and Lord St Vincent desired to know how forward were their preparations, in order to lay plans to prevent a junction with a force of Spanish ships that lay at Cartagena.

For the command of a squadron to proceed upon a reconnoitring expedition to the Mediterranean, Lord St Vincent selected Nelson, thereby greatly offending Sir W. Parker and Sir John Orde, who were Nelson's seniors; the former addressed a remonstrance to the First Lord of the Admiralty, and the latter sent a challenge to his commander-in-chief, which his lordship

calmly ignored.

Nelson sailed from Gibraltar on 9th May, himself in the "Vanguard, and with him the "Orion" and "Alexander," 74's, a couple of 32-gun frigates and a sloop. Eight days later he arrived off Toulon and learnt that there were 13 ships-of-the-line in the harbour, 7 40-gun frigates, 24 smaller war vessels, and 200 transports. Fifteen of the warships were ready for sea; while General Bonaparte was in the port hurrying forward the preparations for embarking an army, destination unknown. This news Nelson at once despatched to his chief by the sloop.

Within a week of his arrival off Toulon, a storm scattered the squadron; the "Vanguard" was dismasted and with difficulty was saved from driving on the coast of Sardinia. The "Alexander" towed the crippled flagship to the small island of San Pietro off the southern end of Sardinia, where in four days she was put under jury rig ready for sea. Sailing again on the 27th, Nelson hoped to pick up with his two frigates, but after the storm they had returned to Gibraltar in the belief that the "Vanguard" had made for that port.

Nelson shortly learnt that the French fleet had left Toulon and

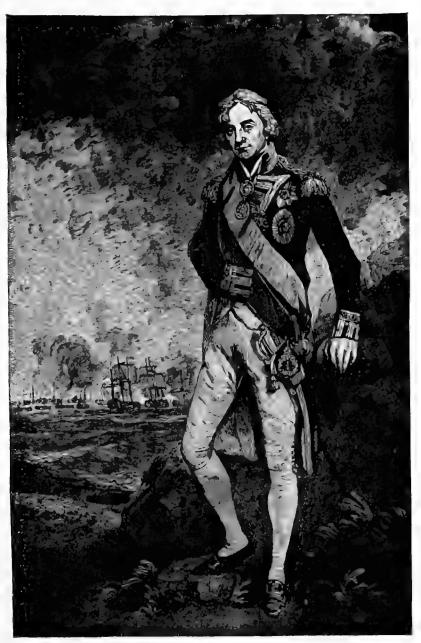
his scouts were necessary more than ever. He failed to find them, but on 5th June he was joined by the brig "Mutine," Commander Hardy, who reported that Troubridge was joining him with ten 74's and a 50. Lord Spencer, the First Lord of the Admiralty, had sent a reinforcement to Lord St Vincent in order that a squadron of a dozen battleships could be sent to the Mediterranean; and in the Admiralty's secret instructions Nelson was suggested as the commander of the squadron, which went to show that Lord St Vincent's judgment had been correct, and Admiral Parker's remonstrance would receive scant ceremony at headquarters.

Bonaparte in a brilliant campaign had conquered İtaly, and when he had pushed on with an army until within sixty miles of Vienna, Austria had made terms. An invasion of England now appearing to be impossible, Bonaparte decided to conquer Malta and Egypt; and then with supremacy in the Mediterranean, he would be able

to strike at us in the East and harry us out of India.

Although the despatch of a squadron to the Mediterranean indicated a vigorous policy on the part of the Admiralty, they failed to supply St Vincent's urgent requests for at least a score of frigates, the "eyes of the fleet." The French expedition sailed from Toulon on 19th May under Admiral Brueys, with whose fleet were over 200 transports carrying between 30,000 and 40,000 soldiers for the operations in Egypt. General Bonaparte himself was aboard Bruey's flagship, "L'Orient." This Toulon fleet was neither well equipped nor manned by well-trained crews, and, being hampered by vast military stores, progress was so slow that Malta was not reached until oth June. The Knights of St John, to whom the island belonged, were forced to capitulate in face of so huge a force. Bonaparte landed a garrison of 4000 men, and a week later resumed the voyage to Egypt. From Malta Brueys steered for Crete, and three days out, the British fleet actually crossed their track, but was unaware of the fact, thanks to that desolating lack of frigates. If Nelson only could have caught the enemy in their slow progress eastwards he might have crippled, if not destroyed, the whole expedition; whereas on 1st July the French fleet stood in to Alexandria and Bonaparte disembarked his army Brueys could not take his ships into the harbour owing to the intricate shallowwatered entrance, and decided to anchor in Aboukir Bay.

Meanwhile Nelson was fuming from one point to another in the Mediterranean in the attempt to discover the French fleet. Off Corsica, Naples, and Messina, in turn, he sought the enemy unavailingly, and at the last-named he heard of the fall of Malta. Nelson suspected Bonaparte's designs on Egypt and sailed for Alexandria, where to his intense disappointment on 28th June he found the harbour empty. Little did he know that "he had anticipated the quarry by two days, but such was the fact, and as the topmasts of the French cruisers in advance of the fleet rose to



LORD NELSON

the west those of the British rear-guard dropped below the horizon to the east."

After searching the Levant, baffled but still determined, the British fleet again made for Sicily. Although Nelson was positively distressed lest his failure to locate the enemy should reflect upon his chief, he did not fail to exercise his gunners, who were attaining marked perfection in their art, and he kept the seamen happy and amused by organised sports. The admiral always viewed himself as the guardian and instructor of his youngest officers. "There are three things, young gentleman," he once said to a middy, "which you are constantly to bear in mind. First, you must always obey orders implicitly. Secondly, consider every man your enemy who speaks ill of your king; and thirdly, you must hate a Frenchman as you do the devil."

During the whole of the irritating cruise Nelson bewailed his want of frigates and said, were he to die, it would be found stamped upon his heart. But he never ceased searching for the French, and sent assurances to Lord St Vincent that were the enemy "above water he would yet find them out and bring them to battle."

The British fleet again turned eastwards and the "Culloden" was detached to Coron Gulf, in the Morea, from whence Troubridge rejoined with the news that four weeks earlier the French were seen steering towards the south-east. Once more Nelson made for Alexandria, which was sighted on 1st August. The French tricolour was waving over the city walls; there was no fleet, however, and British hopes again gave place to mortification; but at four o'clock in the afternoon the "Zealous" signalled to Nelson that in the Bay of Aboukir were 17 French ships, 13 of them being of the line. The British admiral for days had scarcely ate or slept, but he now went to dinner, while preparations were made for battle. "Before this time to-morrow I shall have gained a peerage, or Westminster Abbey," observed Nelson to his officers, when they rose from the table to go to their separate stations.

The British squadron was composed of the following ships:—

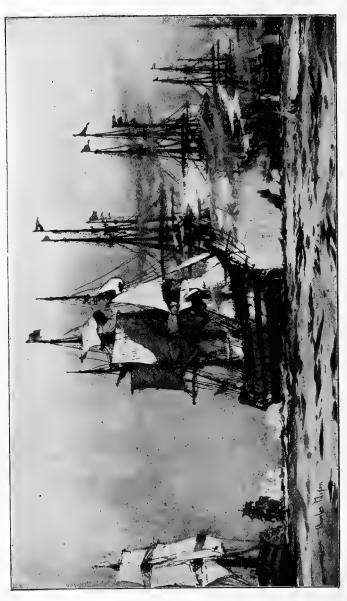
Ship.		Guns.	Officer in Command.
" Vanguard"		74	Rear-Admiral Sir Horatio Nelson
			Captain E. Berry
" Culloden "		74	Captain Thomas Troubridge
" Theseus "		74	,, Ralph W. Miller
" Alexander		- 1	" Alexander Ball
" Minotaur "		- 1	" Thomas Louis
"Swiftsure"		- 1	" Benjamin Hallowell
" Audacious		74	" D. Gould
" Defence "		- :	John Peyton
" Zealous "		- 1	,, Samuel Hood
"Orion".		74	Sir James Saumarez

Ship.	Guns.		Officer in Command.
" Goliath "	 74	Captain	Thomas Foley
	 74	,,	George Westcott
" Bellerophon	 74	,,	Henry Darby
'' Leander ''	 74	,,	Thomas B. Thompson
"Mutine" (brig)		Comman	der T. B. Hardy

Admiral Brueys had disposed his ships in the form of a crescent along the line of deep water, with a space of about 160 yards between each in order to provide room for swinging. Nelson immediately decided that where a French ship could swing there was room for a British 74 to anchor, and, risking the shoals, he would lead his ships inside the French line. Appended is a list of the French ships in their order of mooring in line ahead:—

Ship. "Guerrier".			Guns.	
"Conquérant"			74	" Dalbarade
"Spartiate".	•			" Emerian
" Aquilon " .			74	Commodore Thevenard
" Le Peuple Souver	ain ''		74	Captain Raccord
" Franklin " .				Rear-Admiral Blanquet
"L'Orient".				Vice-Admiral Brueys
(formerly the "Sa	ıns Cu	ıl-		Rear-Admiral Ganteaume
otte,'' but renar	ned :	in		Commodore Casa Bianca
honour of the exp				
"Tonnant".			80	Commodore Du Petit Thouars
" L'Heureux "			74	Captain Etienne
"Mercure".			- 4	,, Cambon
" Timoléon " .			74	T 11 /
"Guillaume Tell"			80	
" Le Généreux			74	Captain Le Joille
" Diane " .			40	,, Solen
" Justice".			40	,, Villeneuve
"L'Artémise".			36	,, Standelet
" La Sérieuse "	•	·	36	,, Martin
La Scricusc	•	•	20	99 11201 0111

It will be perceived that the French held the advantage in ships and guns, as they did also in men. They had 13 ships-of-the-line and 4 frigates carrying 1196 guns and 11,230 men, whilst we had 1012 guns and 8068 men. Our ships were all 74's, but Bruey's great three-decker mounted 120 guns, while three others were 80's. By this time the French had won the Battle of the Pyramids and had made themselves masters of Lower Egypt. If Bonaparte had permitted him, Brueys would have returned to France after the fall of Alexandria, for he was apprehensive of Nelson. He had good reasons. "Fate had delivered him into the hands of a British



BATILE OF THE NILE, IST AUGUST 1798, THE "GOLIATH" LEADING THE BRITISH VAN, CROSSING THE BOWS OF THE "GUERRIER" (From a Drawing by Charles Dixon)

admiral who was to demonstrate, there and then, to the whole world, that with him victory meant annihilation."

As the British squadron arrived late in the afternoon, Brueys doubtless believed that there would be no attack until the next day, but Nelson was in no humour to delay; he had not scoured the Mediterranean for weeks to postpone for a moment getting to grips with the long-sought-for enemy. At half-past five o'clock the admiral signalled his ships to form in line ahead and astern of the "Vanguard": and the "Zealous" to lead, with the rest of the fleet advancing in the following order: "Goliath," "Orion," "Audacious," "Theseus," "Vanguard," "Minotaur," "Defence," "Bellerophon," "Majestic," "Leander." The "Culloden" with a prize in tow to the north-ward, and the "Alexander" and "Swiftsure," a greater distance to the westward, were coming up under press of sail.

Captain Hood, having only a rough plan of the bay, sounded carefully in acting the pilot, and rounded the shoal off Aboukir Island. The "Goliath," now being ahead, but some distance outside the main body, passed inside of the "Guerrier," the foremost French ship, meaning to anchor alongside her, but having run out too much cable, Captain Foley raked the "Guerrier" with a destructive fire and then reached the larboard of the "Conquérant" and hotly engaged her. The "Zealous" dropped into the vacant berth beside the "Guerrier" and at once shot away her foremast, which happy augury elicited the cheers of the whole British fleet. The "Orion," "Audacious" and "Theseus" following, the firstnamed passed under the stern of the "Zealous," when the frigate "Sérieuse" opened fire on her. Captain Saumerez took a wide sweep and ran her down, dismasting her and driving her on to a shoal to become a complete wreck. The "Orion" then brought up abaft the beam of "Le Peuple Souverain" while the "Audacious was within fifty yards of the "Conquérant's" larboard bow, and the "Theseus" inside of the "Spartiate."

When the "Vanguard" came up, Nelson considered sufficient ships had passed inside, and therefore kept away for the enemy's centre, bringing to on the outside beam of the "Spartiate," which the "Theseus" was engaging on the opposite side. The "Minotaur brought up abreast of the "Aquilon" and the "Defence" alongside "Le Peuple Souverain," on whose inner side was the "Orion." "The Bellerophon," running on, brought up outside the huge three-decker "L'Orient," and the "Majestic" got her place within musket shot of the "Tonnant." To the almost indescribable anguish of Troubridge, the "Culloden" struck the outer edge of the shoal and had to remain there until two in the morning.

By this time the battle was raging. The "Bellerophon" was treated to a tremendous fire by "L'Orient," and when the

BATTLE OF THE NILE

A DREADNOUGHT LEAVING THE TYNE FOR STEAM TRIALS.



British ship had lost her masts she cut her cable and drifted out of range. Darkness had set in, and being unable to display four horizontal lights, as arranged, in order that the British could distinguish friend from foe, the "Bellerophon" nearly came to signal grief from the "Swiftsure," which did not come into action until about 8 o'clock. The guns of the latter were about to be fired into the vessel that had drifted aboard her, when Captain Hallowell fortunately hailed to make sure, and Captain Darby's answer saved the receipt of a rain of iron shot that would have devastated the "Bellerophon," which, by the by, seamen generally call "Billy Ruff 'un."

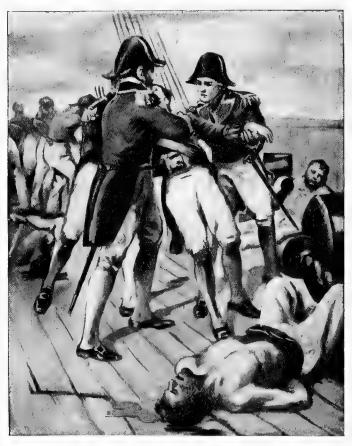
The "Swiftsure" took the place vacated by the "Bellerophon," and the "Leander," having been delayed by attempting to assist the "Culloden" off the shoal, anchored athwart the hawse of the "Franklin"; and finally the "Alexander" passed through the French line and brought up on the inshore quarter of "L'Orient."

Before 9 o'clock the "Guerrier," "Conquérant," and "Spartiate" had surrendered. The first-named was raked by three British ships in succession as they passed, and then the "Zealous" shot away her three masts, silenced her guns, and compelled her to strike. In addition to her masts, she lost her bowsprit and figure-head, and her hull was riddled. No less than 400 of her crew were wounded, while, owing to the excellence of her position, the "Zealous" had only seven wounded. The "Conquérant" was the first ship to surrender. She, too, was raked by several ships before she had to suffer the cross fires of the "Goliath" and "Audacious." The fact that she lost her fore- and mizen-masts, while her main-mast was tottering and her crew decimated, within the space of twelve minutes, speaks for the almost incredible rapidity and effectiveness of the British gunners. The "Spartiate" was fought gallantly until her masts fell, and she surrendered to the fire of the "Theseus" and "Vanguard."

The "Vanguard," while engaging with the "Spartiate," was exposed to a raking fire from the "Aquilon," until the "Minotaur" overpowered her. Just before this occurred, Nelson was struck on the forehead by a piece of langridge shot, cutting it to the bone and dropping a flap of skin over his one eye. The admiral was carried down into the cock-pit, a horrible shambles containing some 30 killed and 70 wounded, but Nelson refused to allow the surgeons to treat him out of his turn; he would not be placed ahead of the meanest of the brave fellows, who had nobly done their part in gaining a victory for him. The British tars worshipped their leader and the reason was not far to seek. Great was the joy throughout the fleet when it was found that the wound, after all, was not serious, and Nelson, with his head bound up, was once more on deck directing the fight.

The "Defence" on the one side and the "Orion" on the other

stripped "Le Peuple Souverain" of her fore- and main-masts: but a shot cutting her cable, she dropped out of line and anchored again near by "L'Orient," but only to strike her colours later; and then the "Defence" devoted attention to the "Franklin," already well raked by the "Leander."



NELSON WOUNDED AT THE BATTLE OF THE NILE

This great battle by night presented a sight impressively grand, the darkness only splashed by the belches of flame from 2000 guns. "L'Orient," after disabling the "Bellerophon," suffered immensely from the joint attack of the "Swiftsure" and "Alexander." Early in the engagement Admiral Brueys was injured slightly, but about 8 o'clock a round shot cut him nearly in two, and he died on the quarter-deck. But worse was to befall the French flagship. About

9 o'clock she caught fire.; the flames spread rapidly and, ascending the rigging, the glowing mass illumined the bay as if it had been broad daylight. When Nelson was informed of the blaze on L'Orient," he was still in the hands of the surgeon, but he hurried on deck and despatched boats to the French flagship to remove her unfortunate officers and crew. The rescuers could not approach the blazing furnace sufficiently near to save more than 70 men.

At 10 o'clock, the fire having reached the magazine, the great 3-decker blew up. She was rent asunder, and decks and masts and guns and men were heaved skywards. The whole bay rocked, high waves swept the shores, the violence of the explosion opened the seams of the surrounding ships. In face of the terrible cataclysm the battle was hushed! Victors and vanquished were awestruck, until on some of the ships it was necessary to bestir themselves to deal with portions of the fiery mass, which fell on decks and among rigging to threaten further danger and death. Our "Alexander," "Orion," and "Swiftsure" were in grave peril owing to their proximity to the "L'Orient," but, foreseeing the inevitable end, their captains had rolled up tightly and wetted all the shrouds and sails in order to make them as little inflammable as possible.

The three French vessels, "Tonnant," "Heureux," and "Mercure" slipped their cables before the explosion occurred, but the "Franklin" was set on fire in several places by the burning debris. It was the last-named that first broke the stillness by firing into the "Swiftsure" and "Defence," but her two opponents, aided by the "Orion," replied by knocking her into an unmanageable state, although she did not strike her colours until 2 o'clock in the morning.

Daybreak revealed a terrible scene of desolation that must have been an appalling sight to French eyes. In addition to the disasters to the French fleet already recorded, the "Heureux" and "Mercure" had drifted ashore, where they fell an easy prey to the victors. The "Tonnant," dismasted, most of her guns disabled, and her captain dead from the loss of both arms and a leg, had veered her cable and now lay near the "Guillaume Tell," which, with the "Généreux" and "Timoléon," had scarcely participated in the fight. Although these vessels were awkwardly placed to leeward, they might have been warped into a position to have rendered their consorts some assistance. Rear-Admiral Villeneuve's flag was flying in the "Guillaume Tell." The four ships last mentioned were about to be attacked by the "Theseus" and "Goliath," when they got under weigh, accompanied by the frigates "Justice" and "Diane." The "Theseus" previously had captured the frigate "Artémise," which now caught fire and blew up; and the "Timoléon" ran ashore and was destroyed by her crew.

Of the whole French fleet, Villeneuve got away with only his own 80-gun ship, and a 74 and a couple of frigates, for the



BATTLE OF THE NILE: THE "ORIENT" BLOWING UP (Engraving from the Painting by P. J. dc Loutherbourg, R.A.)

"Tonnant" surrendered to the "Theseus" and "Leander" on the 3rd. All the rest were captured or burned. But for Nelson's wound taking him out of the fight for a time, it is doubtful if a single ship of the doomed fleet would have escaped from the bay.

Never in its history had the British Navy gained such a decisive and annihilating victory as marked this "Battle of the Nile." "Whether," says Allen, "we take into consideration the determination, the ability, or the vigour displayed, or the result, the battle stands unrivalled, and will probably ever remain so. . . . Each captain knew perfectly well beforehand the wish of the admiral, and gallantry strove to further it. . . . The gallant crews of the British by constant exercising had attained to such a degree of excellence in point of gunnery as will perhaps never be surpassed."

Our losses were 218 killed and 664 wounded.

At 2 o'clock that afternoon the British fleet engaged in a public thanksgiving to Almighty God for the victory with which He had blessed His Majesty's arms. In dramatic contrast to the awful pandemonium that had reigned for hours in the bay was the silence of that solemn service, presided over by the one-eyed, one-armed, wounded little hero on the "Vanguard." Men, weary and worn, grimed and blood-stained, stood bareheaded by the side of the officers under whom they had fought so well. Some of the prisoners were greatly affected, and "the French officers remarked," says Southey, "that it was no wonder such order was preserved in the British Navy, when the minds of our men could be impressed with such sentiments after so great a victory, and at a moment of such confusion."

Four days after the battle Nelson promoted Commander Hardy to take the place of Captain Berry on the "Vanguard," and the latter he sent in the "Leander," Captain Thompson, with despatches announcing the victory to Lord St Vincent. Duplicate despatches to the Admiralty he sent in the "Mutine," Captain Capel, for conveyance to Naples and thence overland to London. "Leander" did not reach her destination, for she was a small type 2-decker little better than a frigate, such as later ceased to be used in the line. Encountering the "Généreux," 900 tons larger and carrying 14 more guns on the broadside, the "Leander" hauled down her flag after a gallant fight in which she was crippled aloft. and lost 35 men killed and 58 wounded; but upon the enemy she inflicted a loss of 100 killed and 180 wounded. Upon their return to England both Captains Thompson and Berry were knighted for their services. The duplicate despatches reached London on 1st October, two months after the battle, and England gave herself up to the wildest enthusiasm.

When Nelson reviewed his prizes he found that the "Guerrier," "Heureux" and "Mercure" were too shot-riddled for a voyage and they were destroyed. "Le Peuple Souverain" was taken to

Gibraltar, renamed the "Guerrier," and set to act as a guardship. The remaining five duly reached Plymouth. The "Franklin," renamed the "Canopus," and the "Tonnant" and "Spartiate," under their own names, were taken into service and proved useful additions to our Navy. The "Canopus," in particular, was a very fine ship, and our shipbuilders found her to be a valuable model.

The dread fate of "L'Orient" gave rise to Mrs Hemans' ballad, "Casabianca." Serving under Brueys was Commodore Casa Bianca, who had his little son aboard with him. The commodore was wounded, and the boy, refusing to leave him, perished with his

father when the great ship blew up.

Captain Hallowell of the "Swiftsure" picked up part of "L'Orient's" main-mast, out of which his carpenter made a coffin for presentation to Admiral Nelson, so that when he had finished his great career he might be buried in one of his own trophies. Nelson accepted the strange offering in the spirit in which it was sent, and as he probably reckoned he had attained the summit of his wishes, and it was good to have death before his eyes, this piece of unusual furniture was given a prominent position in the admiral's cabin. As, however, its presence affected the feelings of his attendants and visitors, the coffin was stowed away below, to be kept in reserve for the purpose for which its gallant donor had designed it.

Passing from grave to gay, an amusing incident is related of Nelson, when he had got aboard the "Vanguard" Rear-Admiral Blanquet and the seven surviving captains of the captured French ships. These officers, who were all wounded, were dining with the British admiral, when, in a fit of abstraction, or possibly because he was almost quite blind from the injury to his one eye, Nelson offered a case of tooth-picks to one French captain, who had lost his teeth by a musket-ball. Greatly abashed on discovering the faux pas, the gallant admiral, in order to cover his confusion, handed his snuff-box to his neighbour on the right, forgetful of the fact that this officer had lost his nose.

The exultation of the nation caused by the great victory crystallised into fresh honours for Nelson. He was created Baron Nelson of the Nile, with a pension of £2000 a year. Had he been a commander-in-chief, instead of serving under Lord St Vincent, he would have been raised to higher rank. In the House of Commons a member claimed that a higher degree ought to be conferred, to which Mr Pitt replied: "Admiral Nelson's fame would be co-equal with the British name: and it would be remembered that he had obtained the greatest naval victory on record, when no man would think of asking whether he had been created a baron, viscount, or an earl."

That the world of commerce viewed Nelson's achievement as of enormous advantage was shown in the sum of f10,000 voted to him by the East India Company, a piece of valuable plate from

the Turkish Company, and a sword from the city of London. The victory was acclaimed, however, not only in England but in countries far and wide. The Sultan of Turkey bestowed upon Nelson a pelisse of sables valued at five thousand dollars, and a diamond aigrette worth eighteen thousand; and also sent a purse of two thousand sequins for distribution among the wounded. The mother of the Sultan presented the admiral with a box set with diamonds, valued at £1000. The Czar of Russia's gifts consisted of his portrait set in diamonds, in a gold box, and a letter of congratu-



 $\label{eq:sir_thomas} \mbox{ troubridge} \\ \mbox{ (Engraving from the Portrait by Sir W. Beechey, R.A.)}$

lation written by his own hand. The King of Sardinia sent valuable gifts, and the King of Naples created him Duke of Bronte in Sicily, together with an estate worth £3000 a year. As on the occasion of the victory at St Vincent, the captains received gold medals, and the lieutenants were raised to the rank of commander. Although the gallant Troubridge did not actively participate in the battle, by the King's express desire he received a gold medal; for if he had the misfortune to get on the shoal, he made signals that served other ships from running aground.

The general rejoicings and the lavish acknowledgments were warranted by the results of the victory, which are summarised admirably in "Britain On and Beyond the Sea": "The gain to

Great Britain was immense. The victory had demolished all Napoleon's hopes of conquering India, and, in addition to destroying a large portion of his sea forces, had locked up in Egypt an army that had no chance of retreat. The naval power of France in the Mediterranean had been broken, and this meant new foes for her. Russia, Turkey, Italy, and Germany were encouraged to renew their struggles to be free from Napoleon's domineering yoke, and, aided by money supplied by the British Government, the Continental nations persevered in their fight for freedom."

In less than three weeks after the Battle of the Nile Nelson sailed with the "Vanguard," "Culloden," and "Alexander" for Naples, leaving Captain Hood on the station at Alexandria. A little later he established a blockade of Malta under Captain Ball of the "Alexander," who had the assistance of a Portuguese squadron. Ball entered into the business whole-heartedly, and succeeded in inciting the natives to rise against their French conquerors, who speedily found themselves shut in Valetta and beset by sea and land. It was useless to attempt to overcome the strong fortifications without a more powerful force than was available, but as we controlled the sea the French could receive no relief from outside and must

eventually yield.

Nearer home, and before the news of Nelson's great victory arrived, a French expedition, with designs on Ireland, was checked in drastic fashion. On 16th September, Commodore Bompart left Brest with the "Hoche," 74, "Immortalité," "Romaine" and "Loire," 46's, "Bellone," "Coquille," "Embuscade," "Résolue," "Sémillante," 36's, and the schooner "Biche." On board was a force of 3000 soldiers. Our 38-gun frigates "Boadicea" and "Ethalion" sighted Bompart's ships when one day out of Brest, and while the "Boadicea" made sail to find Lord Bridport's squadron, her consort watched the movements of the enemy. Shortly the "Ethalion" fell in with the "Anson," 44, and "Amelia," 38, and on 11th October the trio sighted Sir John Warren's squadron off the coast of Donegal. The French were discovered off Tory Island and were brought to battle on the 12th. The British force consisted of the "Foudroyant," 80 (Captain Sir Thomas Byard), "Canada" (flagship of Commodore Sir John Warren), and "Robust" (Captain Edward Thornborough), 74's, "Magnanime" (Captain Hon. Michael de Courcy), 44, "Melampus," 36 (Captain Graham Moore), and the three frigates previously mentioned.

Bompart formed his ships in line ahead, and the "Robust," passing under the stern of the "Embuscade," engaged the French flagship "Hoche." The "Magnanime" passed the "Robust" and engaged with the three 44's, which took flight after a few broadsides, and then Captain de Courcy got athwart the bows of the "Hoche." Between the two British ships Bompart experienced a warm time, losing a considerable number of his crew, and having



THE CAPTURE OF "L'IMMORTALITÉ"

a score of his guns dismounted, when the colours were hauled down. The "Embuscade" surrendered early, but the "Bellone" made a good fight, first with the "Melampus," whose masts she disabled, and then for two hours with the "Ethalion," to whom she struck when she had lost 20 men killed and 45 wounded. The "Coquille" fell to the "Melampus." The remaining French ships got away. Warren's losses were only 13 killed and 75 wounded, while the casualties of the French totalled 462.

But Bompart had not yet seen the end of his troubles. Two days later the "Melampus" chased the "Immortalité" and "Résolue" and captured the latter; and on the 18th the "Anson" secured the "Loire" after a desperate encounter, in which the French losses were 48 killed and 70 wounded. On the 20th our 38-gun "Fisgard" (Captain Thomas B. Martin) fell in with the "Immortalité" and fought her fiercely for four hours. The French ship, when she struck, had lost her mizen mast and her hull was riddled; 57 of her crew (including the captain and three other officers) were killed and 60 wounded. Only the "Romaine" and the "Sémillante" were now left to the utterly discomfited Bompart, and these he contrived to take back to Brest.

CHAPTER XVII

NAVAL SUCCESSES FAR AND WIDE

If the year 1799 was not marked by any great naval engagement there were numerous minor activities, all of them interesting, and not a few of them positively brilliant; and in these never-ceasing skirmishes with the enemy on all the seas, the British seamen gained the skill and confidence that stood them in good stead when called

upon to face the greater ordeals.

The destruction of the French fleet in Aboukir Bay had left us free to police the Mediterranean with very fair effect under Lord St Vincent, who now received assistance from Portugal, Turkey, and Russia, although their aid was more nominal than effective. Lord Keith, second-in-command, was engaged in blockading the Spaniards in Cadiz; Hood, who had been joined and really superseded by Captain Sir Sidney Smith, was still off Alexandria; Ball was off Malta, as previously mentioned; Duckworth was off Minorca, which he had reduced in November 1798; and Nelson was at Naples, endeavouring to straighten out the affairs of the two Sicilies, where trouble threatened owing to the capture of Rome by the French and their advance upon Naples.

In the Channel Lord Bridport was watching Brest, but in a fashion that spoke little for his alertness. Notably was this the case in April 1799, when Admiral Bruix left the French port with 25 sail-of-the-line and two other vessels. When Bridport learnt that the French admiral was at sea, he concluded that another descent upon Ireland was meditated, and the British squadron sailed for Cape Clear, whereas Bruix's destination was Toulon, which he reached without interference, although Lord St Vincent

was in pursuit with 20 sail.

By that time, however, Bruix had gone to Italy to land a small force of troops, after which he proceeded to Cartagena to pick up a Spanish squadron. Although he had now 60 sail-of-the-line Bruix made no attempt to meet St Vincent, but sneaked out of the Mediterranean and reached Brest safely in August, after an absence of nearly four months. Meanwhile St Vincent had sought the French fleet in vain on account of his want of frigates, and then, owing to illness, he left Keith in command and returned home.

The latter continued to hunt for Bruix, and eventually got upon his track, only to be outsailed by some forty-eight hours, Keith arriving off Ushant about the time Bruix was anchoring at Brest.

When Bonaparte was isolated in Egypt, he decided upon the conquest of Syria, and by March 1799 he was encamped before Acre. The appointment of Sir Sidney Smith to the Alexandria station,



SIR SIDNEY SMITH AT ACRE

with authority to act independently of either Lord St Vincent or Nelson, gave great offence to those illustrious officers, but Sir Sidney was a man of grit and initiative, as shown on page 289, and in this case he proved to be the right man in the right place. When Acre was threatened, he steered for that port, and concerted measures with D'Jezzar for its defence. While on his way, Sir Sidney fell in, off Cape Carmel, with a French flotilla laden with heavy cannon, ammunition, and other stores for use in the siege. The British commander captured the whole and conveyed them to Acre, where

they were employed against the French with very good effect. Although Sir Sidney took a leading part in organising the military defence, we are concerned only with the seamen, who more than once rendered excellent service on land. The French were constructing a mine whose completion would work havoc with the defence, and while 2000 Turks made a sortie, a British naval force jumped into the mine and demolished it. And all the while the "Tigre" and "Theseus" gave to the garrison the protection and assistance of their guns.

The besiegers never relaxed their efforts, and on April 28th they were encouraged by the arrival of three pieces of battering artillery and six 18-pounders, which French frigates had landed at Jaffa. About the same time a fleet of Turkish corvettes and transports arrived in Acre Bay. The French continued their operations for sixty days and were then forced to retreat, their battering train of 23 pieces falling into the hands of the British. The end of the siege showed up Oriental methods of warfare, in painful contrast to the humanity exhibited by Western nations. The Turks, placing no faith in capitulations, massacred the French prisoners and wounded in cold blood, believing that the only way to secure themselves against an enemy was to put them to death. They bound their prisoners two and two, struck off their heads, put the bodies in sacks, and flung them into the sea, to the distress of their British allies, who had not anticipated this cruel work, or steps would have been taken to prevent it. The French losses before Acre numbered 3000.

Bonaparte was deeply disgusted at his defeat by a mere British post-captain, whose genius alone saved Acre. Sir Sidney, it is said, challenged Bonaparte to allow the fate of Acre to be settled by a duel between themselves, but the latter contemptuously

refused to fight, unless with an equal.

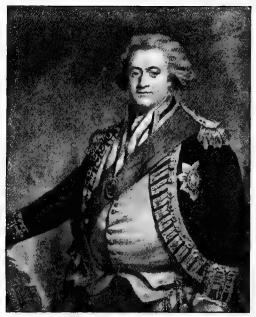
In the actual defence of Acre the British losses were less than 30 killed, 66 wounded, and 82 taken prisoner. But an accident aboard the "Theseus" increased our casualties very considerably. On 14th May, when about to chase Admiral Perrée, off Cæsarea, 70 shells exploded on the poop. Captain Miller and 30 men were killed; 9, who jumped overboard, were drowned, and nearly 50 wounded. Some portions of the ship were shattered, and she was set on fire, which was put out by the great exertions of the crew.

Bonaparte, with this additional failure to place to his record, returned to Cairo, where he heard news that made him desirous of returning to France. He embarked at Alexandria in a frigate, and, evading interference by British ships, landed at Fréjus early in

October.

In the autumn of this year the Dutch navy was in a bad way, owing to the disaffection among the seamen concerning the expulsion of the Stadtholder from Holland by their French allies. The result was seen when Admiral Duncan was joined by Vice-Admiral Mitchell with a large squadron, carrying a combined force of British and Russian troops to be landed in Holland. The Dutch seamen refusing to fight, Admiral Storey was forced to surrender his whole squadron without the firing of a shot. The allied army was landed in due course, but did not achieve anything worthy of mention.

The French frigate "Forte," of 44 guns, had made herself a terror to merchantmen in the Indian seas, and it became necessary to check her depredations; and in February 1799 Captain Edward



LORD DUNCAN (From the Painting by J. Hoppner, R.A.)

Cook sailed from Madras in the 38-gun frigate "Sybille" in search of her. On the last day of the month he fell in with the "Forte" with two lately captured prizes, although at the time Cook did not know but that they were her consorts. By the exercise of smart seamanship, the "Sybille" raked the stern of her opponent, and then at close range kept up a destructive fire on the "Forte's" lee-quarter. When Captain Cook was mortally wounded, Lieutenant Hardyman continued the fight with unabated vigour, until he quite dismasted his adversary, who ceased firing and came to anchor. Hardyman instantly set to work to refit his damaged rigging, in preparation for the attack of the other two vessels. The "Forte"

then hailed him and, putting off a boat, the lieutenant discovered that he had captured three ships instead of one, as he had supposed. The "Sybille" had lost 60 officers and men killed, and a large number of wounded. Our ship lost only five killed and less than a score wounded. The East India Company erected a handsome monument in Calcutta to Captain Cook, as a mark of their gratitude for the removal of a great menace to British trade. The "Forte" was a particularly handsome vessel of 1400 tons burden, although at the time of her capture 250 shot in her hull had not improved her appearance.

Another French frigate, the "Preneuse," 36 guns, was a similar pest in South African waters. In Algoa Bay lay our store-ship "Camel," 24 guns, and the 16-gun sloop "Rattlesnake"; their captains and some portion of their crews were ashore, assisting the army of General Dundas. Whilst at this disadvantage the French frigate attacked them, but after a vigorous action of three hours the "Preneuse" was beaten off. Three weeks later the British frigate "Jupiter," 50 guns, Captain Grainger, encountered the Frenchman, who got away owing to a heavy sea preventing Grainger from opening the lower-deck ports, so that he could only bring 12- and 6-pounders to bear on the enemy. In December, however, the "Preneuse" met her fate in the shape of the "Tremendous," 74, and the "Adamant," 50. She was chased and driven ashore almost under the guns of Port Louis, Mauritius. Her crew deserted her and got away, and then, daring the guns of the shore batteries, the British seamen destroyed the French frigate where she lay.

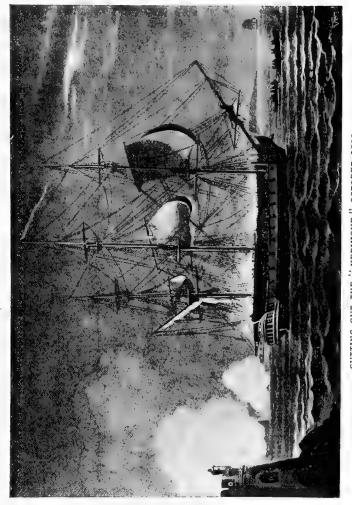
The "Hermione," 32-gun frigate, on the West Indian station in 1707, was in command of Captain Hugh Pigot. He was a man of dash and resource and his men lacked nothing in courage, as was shown early in the year, when, under the guns of a Porto Rico battery, they cut out and captured three French privateers, which they followed up by destroying the battery itself. Unfortunately the captain's relentless severity goaded the seamen to revolt, and then the certainty of drastic punishment caused them to adopt the extreme measure of murdering the captain and several officers, and turning the rest adrift in a boat. The frigate was then taken to La Guavra harbour and handed over to the Spaniards, who now utilised her for fighting against Great Britain. This outrage created the wildest indignation among the British officers in West Indian waters, and set up a fierce resolve to effect the recapture of the "Hermione," but, notwithstanding all efforts, she remained at large for two years.

In the autumn of 1799 Sir Hyde Parker learnt that our erstwhile frigate was sailing for Havana, and he despatched Captain Edward Hamilton, in the "Surprise," 32-gun frigate, to intercept her. On 21st October it was discovered that the "Hermione" was moored between two strong batteries at the entrance to the harbour of

Porto Bello, and finding that she had no intention of leaving. Hamilton decided upon the desperate expedient of cutting her out from under the 200 guns that protected her. On the night of the 24th 106 officers and men embarked in six boats. Three of the boats under Captain Hamilton purposed boarding the frigate and mastering the crew, while the other division would cut the cables and tow the vessel out of harbour. At midnight the expedition was discovered by two Spanish guard-boats, which three of Hamilton's engaged, while the other three attacked the frigate. This small handful of men, by the display of the greatest heroism, carried the ship after a fierce hand-to-hand conflict, cut the cables, loosed the sails to assist the tow boats, and cleared the harbour. The batteries opened fire on the captive "Hermione" and damaged her at the water-line, but the pumps were set going, and at 2 A.M. she was out of range. The Spaniards on board had surrendered on being driven below. In this desperate exploit Hamilton had not a single man killed, and of the dozen wounded the leader himself was the worst sufferer. The butt of a musket had been shattered on his head: he had been thrust deeply in the thigh with a pike; his other leg showed a heavy sabre-cut and a grape-shot wound. The Spanish crew lost 119 killed and 97 wounded, which was ample testimony to the bitter energy of the assault.

For this notable action in avenging a gross indignity to our Fleet, Captain Hamilton was awarded the Order of the Bath, and he recovered from his wounds to wear the ribbon of honour. The captain returned to Europe for the restoration of his health on the Jamaica packet, which unluckily was captured by a privateer, and instead of returning to England the gallant officer found himself a prisoner in Paris. When Bonaparte, then First Consul of France, heard of his brilliant exploit, he treated the captive with marked consideration, and restored him to liberty by an early exchange.

On 16th October four British frigates made a luckier "haul" than had ever entered their calculations. The vessels concerned were the "Ethalion" and "Naiad," 38's, and the "Triton" and "Alcmene," 32's. This quartette brought the Spanish frigates "Thetis" and "Santa Brigada" to action off Cape Finisterre. The "Thetis" struck to the "Ethalion," but the "Santa Brigada" avoided capture until the next day, when she hauled down her colours to the "Alcmene. Great was the British joy to discover that their prizes were laden with gold and silver, sufficient to load 60 artillery-waggons when the treasure reached Plymouth and was conveyed to the citadel. The prize shares worked out at £40,739 for each captain; lieutenants, £5091; warrant officers, £2468; petty officers, £791; and each seaman and marine, £182. These prize shares fell far below the value of those mentioned on page 217, but it was, nevertheless, accounted a well-paid action by the fortunate participants.



CUTTING OUT THE " HERMIONE," OCTOBER 1799

We had to wait until the year 1800 for the finale of the Battle of the Nile, so far as the ships that participated in the fight were concerned. Villeneuve got away with only two battle-ships, viz. the "Guillaume Tell," 80, and the "Généreux," 74. The latter was heard of later, when she captured the "Leander" on the way to Gibraltar with despatches, and all this time the "Guillaume Tell" had lain in Valetta harbour.

On February 6th 1800 Rear-Admiral Perrée sailed in the "Généreux" from Toulon, with transports carrying stores and reinforcements for General Vaubois and his 5000 troops in Valetta. Unfortunately for Perrée he fell in with Nelson's new flagship, the "Foudroyant," 80, "Alexander," 74, and the frigate "Success." In a short and brilliant engagement Perrée was killed by a round shot, upon which the "Généreux" surrendered with her crew and 2000 soldiers. The remaining vessels of the French expedition fled, thus sealing the fate of the beleaguered Valetta garrison.

Bitterly pressed and no relief arriving, General Vaubois set Admiral Decres the task of breaking through the blockade with the "Guillaume Tell," in order to inform the French government that he was in extremity, and could hold out only a few weeks longer. Just before midnight on March 30th the French admiral sailed, hoping to get away under cover of the darkness. With the light he was discovered by the "Penelope," 36 guns, which not only followed the 80-gun ship, but had the audacity to engage her, in the hope that the sound of the guns would attract the attention of Troubridge or other of his blockading ships. The gallant little frigate entered into the fight with all the vim of a first-rate. Splendidly handled, she twice crossed the stern of the "Guillaume Tell " and very effectively raked the great ship, which could only reply with her stern chasers. Sticking to the foe with disconcerting pertinacity, the "Penelope" shortly shot away her opponents main and mizen masts, which delayed the "Guillaume Tell" until the "Lion," 64, came up to harass the Frenchman still further, Dixon promptly poured a broadside into her and kept pegging away until, much cut up in the rigging, the "Lion" dropped astern.

At that point there seemed a prospect of the "Guillaume Tell" breaking away from her foes, when the "Foudroyant," Sir Edward Berry, came upon the scene, and emptied a broadside into the foe. Decres returned the compliment by shooting away the "Foudroyant's" fore-topmast, maintopsail-yard, jib-boom and spritsail-yard, in addition to cutting her sails to rags. The seventy-four dropped astern crippled, leaving the "Lion" and the "Penelope" to continue the fray, the first on the larboard beam, and the latter on the quarter of the enemy. By the time the "Guillaume Tell" had lost her main and mizen-masts, the "Foudroyant" had cleared away her wreckage and was prepared to renew operations, where-



THE "PENELOPE" AND "GUILLAUME TELL, APRIL 1800

upon Decres struck his colours. His vessel was an absolute wreck and had lost 200 men killed and wounded.

This success was practically due to Captain Hon. Henry Blackwood, whose daring and perseverance on the "Penelope" were beyond all praise. The "Guillaume Tell" was renamed the "Malta" and added to our Navy, ranking with the "Tonnant"

as the two largest two-deckers in the service.

Fortunately for us Lord St Vincent's health had improved. and in April, 1800, he took command of the Channel fleet, and settled down to a close and rigid blockade of Brest; and a blockade by St Vincent was a very serious matter, as Cadiz had learnt during many weary months. Nelson having returned to England, Lord Keith was in command of the British squadron in Italian waters. Genoa was in the hands of the French, Massena holding out against an Austrian army that besieged it by land, while Keith bombarded it by sea. At the dead of night upon one occasion Captain Beaver of the "Aurora," 28, set out upon a desperate mission with only 10 boats and 100 men. His object was to capture a long galley. with a crew of 250 men. This in itself would appear to have been a sufficiently onerous undertaking, but as the galley was moored under the protection of some batteries, the danger was greatly intensified. Nevertheless the galley was boarded and captured in the most gallant manner. On the other side of the account, however, the British squadron shortly bewailed the loss of the flagship "Queen Charlotte," 100 guns. On March 17th she took fire and First-Lieutenant Bainbridge, and the greater portion of the crew, perished helplessly in the flames. Genoa presently was surrendered owing to famine, but within a fortnight the city was again in the hands of Bonaparte, who crossed the Alps with a huge army, and by the great victory of Marengo made himself master of the whole of Northern Italy.

Many of our smaller warcraft ranged the seas literally spoiling for a fight, but often enough the enemy refused to be engaged, if there were the least opportunity of avoiding it. In some cases our dashing commanders were too impatient to wait for chance encounters; but did not hesitate to seek the enemy, when in the fancied security afforded by harbours well protected by batteries. Various instances of this kind have been noticed in preceding pages, and to them may be added the following brilliant exploits.

Captain Inman of the "Andromeda," learning that some French frigates were lying in Dunkirk harbour, despatched Commander Patrick Campbell in the 30-gun corvette "Dart," with two gunboats, five fireships and some cutters, to destroy them, or in any case to damage them as much as possible. Campbell set out about midnight on July 6th, and after a while found four frigates, "Carmagnole," "Désirée," "Incorruptible" and "Poursuivante," moored in line ahead. Campbell was hailed by the first frigate,

but escaped suspicion by answering in French. He continued his course until abreast of the "Désirée," which opened fire on the "Dart," whose commander anchored her by the stern and swung her alongside the Frenchman. Fifty of the "Dart's" crew sprang



THE BURNING OF THE "QUEEN CHARLOTTE"

aboard and almost carried the upper deck before the men of the "Désirée" knew what had happened, and a second instalment of boarders arriving, the ship was captured. In a quarter of an hour the "Désirée" lost 100 killed and wounded; she had changed hands, her cables were cut and she was being got out of harbour. If Commander Campbell did not exactly carry out his orders concerning the destruction of the frigates, he added a fine ship of 1000

tons to the British Navy, a praiseworthy performance for which

he was deservedly posted to the "Ariadne."

In any account of this memorable war it would be unfair to omit reference to the extraordinary career of the brig "Speedy," of 158 tons, only carrying fourteen 4-pounder guns, with a crew of 90, inclusive of the six officers. In the year 1799 she was commanded by Captain Jahleel Brenton, who scored some marked successes. Aided by a small privateer, he effected the capture of three Spanish gunboats; assisted some merchantmen out of the clutches of a flotilla of Spanish armed vessels, of which he captured a couple; and off Europa Point he repelled a dozen gunboats that had come out bent upon his capture. When Brenton was promoted for his services, the "Speedy" passed under the command of Lord Cochrane, afterwards Earl of Dundonald. As a lieutenant on the "Queen Charlotte," he had greatly pleased Lord Keith by his conduct in the recapture of a cutter, which had been taken by a couple of French privateers.

The "Speedy's" new commander was a tall man, and in his "Autobiography" he humorously asserts that when he desired to shave aboard his little craft, he had to put his head out of the skylight; and he used to say that he could carry one of the brig's broadsides comfortably in his coat pockets, the total weight of metal being only 28 lbs. The "Speedy" now became an absolute terror, not only to the merchantmen of our enemies, but also to their smaller warcraft. In the space of only five weeks she captured half-a-dozen prizes, amongst them two useful little war vessels. The Spaniards sent out heavy ships to capture her, but she continued to sail the seas as if Cochrane had never heard of the French

and Spanish navies.

Cochrane's escape from capture, with the certainty of a Spanish dungeon for his pains, was due partly to his fertility of resource, which often stood him in good stead, when fighting would have been of no avail. He was an adept at disguising his ship, and once when posing as a Danish brig he chased a big Spanish zebec, the "Gamo," which he assumed to be a merchantman. But the Spaniards had learnt a lesson from him, and they, too, had disguised a fighting ship, armed to the teeth. The brig's suspicious conduct led to the lowering of one of the "Gamo's" boats which approached to make inquiries of her. Up went the brig's quarantine flag, and one of her officers, dressed in a Danish uniform, glibly informed the Spaniards that they were two days out of Algiers, where plague was known to be raging; and the Spanish commander decided to give her a wide berth and stood on his way.

If Lord Cochrane were filled to the brim with reckless daring, his seamen were no whit behind him. They formally complained because they had not been allowed to attack the Spaniard; and consequently it was agreed solemnly by officers and men that

they would fight any Spanish frigate afloat. Months later their wish was gratified, and an account of it will appear later in proper sequence.

The commencement of the nineteenth century showed the influence of Bonaparte over Europe fully restored. Under the title of First Consul he was practically the ruler of France. In the first



LORD COCHRANE
(From the Portrait painted by Stroehling in 1809)

week of December, at Hohenlinden, he inflicted a great defeat on the Austrians, which caused them to sue for peace; and as in the previous September we had taken Malta, which Napoleon had promised to Czar Paul, Russia's friendliness for us had evaporated. Finding that he was unable to sweep the British flag off the seas, even though aided by Spain and Holland, Bonaparte sought to inflame Russia, Sweden and Denmark against us; and our practice of searching neutral ships, suspected of carrying goods to or from

an enemy's country, afforded him an excellent opportunity to stir up trouble. In 1780 the three countries last mentioned had leagued themselves against us, under the title of the "Armed Neutrality," on account of our claim to "right of search," but had not proceeded to extreme measures. But if they did not actively oppose us now, it would be from no lack of argument and persuasion by Bonaparte. Matters were brought to a head in June 1800. Danish frigate "Freya," with a small convoy of merchantmen, was detained by a British squadron for search, and, when the Danes resisted, the "Freya" was captured. There was no need for further pressure by Bonaparte. With the opening of the new century we found ourselves at war against France, Spain, Holland, Russia, Denmark and Sweden.

Bonaparte's successes on the Continent did not assist the army he had left in Egypt under the command of General Kleber, and which had been greatly reduced in numbers owing to casualties and sickness. Operations were practically at a standstill for want of reinforcements, which our blockade had quite prevented. January 1901 the French made an effort to relieve Kleber, and Rear-Admiral Ganteaume left Brest with a squadron, carrying 4000 troops. He reached Toulon and again sailed on March 22nd, but during a storm two of his ships suffered much damage, and he put back to port. He was still there at the end of April because he believed that Sir John Warren was looking out for him; but in any case his prolonged inaction did not appear to indicate either zeal or enthusiasm for his commission.

In response to Bonaparte's exhortations he left for Egypt on April 27th, and arrived there safely early in June. Before he could disembark the troops, Ganteaume took fright at the mere report of Lord Keith's proximity, and he departed with all speed without landing a soldier. During the French admiral's return to Toulon he was solaced by the capture of the "Swiftsure," 74. Captain Hallowell fought gallantly against tremendous odds, but in the end had to strike his colours. It was a rare event for a British ship-ofthe-line to be taken captive into a French port, and we could afford not to begrudge their navy the immense gratification it caused them.

As a matter of fact Ganteaume's expedition was an utterly futile proceeding, for a British force of 16,000 men under General Sir Ralph Abercromby had already set out for Egypt to oust Kleber. Lord Keith, in command of the squadron, and Abercromby of the troops, had originally intended to operate against Spain at Cadiz in the autumn of 1800; but they proceeded into the Mediterranean, and after calling at Minorca and Malta, anchor was dropped in Aboukir Bay on March 2nd. The battle of Alexandria, in which the gallant Abercromby fell, was a military glory, but the Navy shared in reaping the victory by supplying a naval brigade of 1000 seamen,

who fought splendidly under Sir Sidney Smith. And in the further operations, as our army forced its way along the banks of the Nile, a division of gunboats under Captain Stevenson reached Rahmameh, 170 miles up the river, and successfully attacked the French forts. In May, General Belliard and his entire army surrendered at Cairo, and the whole force was transported to France in British ships.

CHAPTER XVIII

THE BATTLE OF THE BALTIC

The British government had no intention of waiting for our six enemies to enter into combined action against us, and it was decided to strike a blow at the "Armed Neutrality" by an early attack upon Copenhagen and the Danish fleet. This promptitude was commendable enough; but less could be said for the selection of Sir Hyde Parker for the chief command, when professional and public opinion pointed to Nelson as possessing an urgent claim to the honour. It was, however, contrary to the custom of the service to made a junior admiral a commander-in-chief, and thus in his selection Lord Spencer, the first lord of the Admiralty, followed the customary usage. But Vice-Admiral Nelson was appointed second-in-command, and Sir Hyde Parker was a brave and experienced seaman, who would not fail to give him opportunities for exercising his great genius.

The British squadron assembled at Yarmouth and sailed on 12th March 1801. Eighteen days later Parker had passed through the Sound and anchored five miles from Copenhagen. So far nothing had happened, except that the guns of Elsinore Castle on the Swedish side of the Sound had fired at our ships, but could not reach them by a cable's length. There had been some delay in the advance of our fleet, chiefly while our minister, who had lately left the Danish court, made the last efforts to avoid a conflict; but nothing came of the negotiations, while the Danes had been given additional time in which to improve their

defences.

Copenhagen was well situated for defence from the sea. The approach to the principal channel was guarded by Trekoner fort, from which extended southwards a line of block ships, flanked by batteries. Before the city was a flotilla of ships, gunboats, pontoons, floating batteries, fireships, etc.; and a chain was thrown across the inner harbour. The whole of the Danish naval force was under the command of Commodore Olfert Fischer.

The British fleet, under Admiral Sir Hyde Parker, comprised the following ships:

Ship		Guns.	Officer in Command.
" London "		. 98	Admiral Sir Hyde Parker
			Captain R. Otway
"St George"		. 98	Vice-Admiral Lord Nelson
q			Captain T. M. Hardy
" Defiance		· 74	Rear-Admiral Graves
			Captain R. R. Retalick
'' Bellona ''		· 74	" Sir T. B. Thompson
" Defence		. 74	,, Lord H. Paulet
" Edgar "		· 74	" George Murray
" Elephant		· 74	,, Thomas Foley
" Ganges		· 74	,, T. F. Fremantle
" Monarch		· 74	,, J. R. Mosse
" Ramillies		· 74	,, James Dixon
" Russell		· 74	,, William Cuming
" Saturn "		· 74	" Robert Lambert
" Warrior "		· 74	,, Charles Tyler
" Ardent "		. 64	" Thomas Bertie
" Agamemnon	"	. 64	" Robert Fancourt
" Polyphemus	,,	. 64	,, John Lawford
" Raisonnable	"	. 64	,, John Dilkes
" Veteran "		. 64	,, A. C. Dickson .
" Glatton "		• 54	" William Bligh
" Isis".		. 54	" James Walker

In addition to the foregoing there were 6 frigates: "Désirée," 40, Captain Inman; "Amazon," 38, Captain Riou; "Blanche," 36, Captain Hammond; "Alcmene," 32, Captain Sutton; "Dart," 30, Captain Devonshire; "Jamaica," 24, Captain Rose; and about a score of smaller vessels, sloops, bomb-ships and fire-ships. On the way to the Baltic the "Invincible" (Rear-Admiral Totty) was wrecked on the coast of Norfolk, when 400 of the crew perished. The Admiral transferred his flag to the "Zealous," but did not reach Copenhagen until after the battle.

The Danish fleet consisted mostly of block ships, but they were well armed and thoroughly manned by men, who would fight with true Scandinavian stubbornness. The four biggest vessels were the "Zealand," 74, "Indfoedsretten," 64, "Dannebrog," 62, and

"Holstein," 60.

Admiral Parker was undecided how best to attack, and, indeed, afflicted by doubts whether it were wise to attack at all. At a council of war on the "London," Nelson offered to make an assault with ten sail-of-the-line, and the commander-in-chief gave him his blessing and a couple of ships more than he asked. The plan was to take a division through the shoals and attack from the south side, while Parker, with the rest of the ships, engaged the defences

at the northern end. The Danes had removed all buoys, so that Nelson had to survey the channel and mark the shoals afresh.

Nelson's division consisted of the following ships: "Bellona," "Defiance," "Edgar," "Elephant," "Ganges," "Monarch," "Russell," 74's; "Agamemnon," "Ardent," "Polyphemus," 64's; "Glatton," "Isis," 54's; the six frigates and various smaller craft. The admiral's proper flagship was the "St George," commanded by Captain Hardy, but Nelson had shifted to the "Elephant" as drawing less water, and Hardy accompanied him as a volunteer. On 1st April this flotilla passed through the channel safely, and brought up about two miles from Copenhagen; and required only a favourable wind for the ships to take up their assigned positions. During the night Captain Hardy was in a boat close to the enemy's ships sounding with a pole, because the noise of heaving the lead might have attracted attention.

On 2nd April the wind was fair but the pilots, mostly the mates of small trading vessels in the Baltic, refused to undertake the responsibility of navigating the big ships. Said Nelson, "They have no other thought than to keep the ships clear of danger, and their own silly heads clear of shot." Mr Briarly, master of the "Bellona," undertook to pilot the squadron in, and the vessels weighed in succession about 9.30 a.m. The "Edgar" led, but the "Agamemnon" was stuck fast and unable to follow. The pilot of the "Bellona" got her aground, and the "Russell" followed suit, with her jib-boom almost over the Bellona's taffrail. This was by no means a favourable beginning, for, with three ships unable to take up their proper position, the attack was weakened and the stations of other ships had to be revised accordingly. The fourth ship in was the "Elephant," and Nelson, ignoring the pilots' directions, passed to the westward, thus avoiding the fate of her consorts. The other eight British ships followed and anchored abreast of the Danish floating batteries, that were ranged along the shoal water on the western side of the channel.

The action commenced at 10 o'clock, but it was 11.30 before all our ships reached their stations to make the battle general. The British ships were in a compact line about a hundred yards apart, and about two hundred yards separated the hostile lines. The "Elephant" was in the centre of our line, directly opposite to the "Dannebrog," on which was the Danish commodore, Fischer. Owing to the absence of three of our ships from the line, some of our vessels had to deal with more than one opponent, and in any case our line did not extend far enough to engage the Crown batteries. In particular, it was desirable to divert the fire of Trekoner fort from the "Defiance," the foremost ship in our line.

To accomplish that end Captain Riou led the frigates to attack those formidable works, and incidentally the "Désirée" was so placed as to be able to rake the heavy Dutch ship "Provesteen."

BATTLE OF COPENHAGEN, 2ND APRIL 1801

Captain Inman's skill and daring greatly pleased Nelson, who afterwards said of the "Désirée," "She lost not a man, but cut the 'Provesteen,' a ship carrying 36 and 24-pounders, to pieces." For three hours the engagement continued, but no matter how rapid and precise our firing, not one of the Danish ships was silenced; the "Bellona" and "Russell" had hoisted signals of distress, and most of our ships had suffered extensive damages.

Meanwhile Sir Hyde Parker tried to beat up nearer to the city and, understanding that Nelson was being stubbornly opposed, detached a couple of 74's and a 64 to his assistance; but owing to the light winds they were making very slow progress. Unable to see exactly what was taking place, and afraid that Nelson would be overpowered, Parker made the signal to discontinue the

action.

At that time the "Elephant" was engaging more furiously than ever with the "Dannebrog," and shot and splinters were flying round the admiral. When the chief's signal was reported to him, Nelson ordered that it should only be acknowledged, but not repeated. Almost immediately afterwards his lordship inquired if his own signal for close action was still flying, and upon receiving a reply in the affirmative, ordered, "Mind you keep it so."

After pacing up and down the deck, greatly agitated, as shown by the manner in which he moved the stump of his right arm, Nelson addressed Captain Foley: "Leave off action! now, damn me if I do. You know, Foley, I have only one eye and I have a right to be blind sometimes," and putting his glass to his blind eye, he added, with sportive bitterness, "I really do not see the signal." A few more turns of the deck and Nelson exclaimed: "Keep my signal for close action flying. That is the way I answer such signals. Nail mine to the mast!"

It should be stated that Sir Hyde had no intention of overriding any of Lord Nelson's measures; the signal meant that if Nelson deemed it advisable to discontinue the action, the responsibility would be accepted by Parker; and later, Otway, the chief's flag-captain, brought to Nelson a verbal message to that effect.

The British ships still blazed away at the enemy, except the frigates, who hauled off in response to Parker's signal, not being able to see for smoke that Nelson was disregarding it. Not that it made much difference, for the Trekoner batteries were too strong for ships so small. Not only were the frigates badly shattered during their plucky display, but they had to mourn the loss of Captain Riou, who was literally cut in two by a round shot.

Quite early in the action Captain Thura of the "Indfoedsretten" was killed, and all the officers, save one lieutenant and one marine officer, were dead or wounded. Another captain was sent aboard

from ashore, but had scarcely got on deck when he, too, was killed, leaving the ship in command of a lieutenant who had accompanied him. A youth of seventeen named Willemoes commanded a floating



HE SAID, WITH SPORTIVE BITTERNESS, "I REALLY DO NOT SEE THE SIGNAL"

battery, little more than a raft carrying 24 guns and 120 men. He got under the stern of the "Elephant," below the reach of the stern chasers, and did no little damage to Nelson's flagship.

Nelson's determination was now speedily rewarded. At 1.30 the Danish fire had slackened, and by 2 o'clock many of their ships

had not only ceased firing, but exhibited no flags. In the belief that they had surrendered, British boats were put off to take possession of them, but the depleted Danish crews were being reinforced continually from shore, and the boats in every case were received with a hot fire. This unusual conduct was merely stubbornness run mad, and in a moment of irritation Nelson almost ordered fireships to be sent in among the helpless hulks; but upon second thoughts he decided to address the following letter to the Crown Prince of Denmark:

"Vice-Admiral Lord Nelson has been directed to spare Denmark, when no longer resisting; but if the firing is continued on the part of Denmark, Lord Nelson must set on fire all the prizes he has taken, without having the power of saving the men who have so

bravely defended them."

It is related of Nelson, as showing his attention to details, which others might overlook, that upon being offered a wafer with which to seal the letter, he waved it aside, saying, "No, this is no time to appear hurried," and sent to his cabin for wax. On his way thither the messenger was killed, and a second man was despatched on the errand. When sealed, the letter was taken ashore by Sir

Frederick Thesiger with a flag of truce.

Meantime operations were continued and two more Danish ships were silenced, and as the "Defence," "Ramillies," and "Veteran" had now come up, the position of the Danes was past all hope. The "Elephant" and the "Glatton" still engaged the "Dannebrog." Commodore Fischer had already transferred himself to the "Holstein," and Braun fought the flagship until his right hand was shot off, when Captain Lemming took command. The two British ships now plied the foe with such deadly outbursts that when the smoke cleared away the "Dannebrog" was seen to be in flames, drifting before the wind, and some of her crew were throwing themselves out at the port holes.

At this time, while the Crown batteries, which had been reinforced by more than a thousand men, were still firing vigorously, General Lindholm came off to the "Elephant" with a message from the Crown Prince, inquiring the precise object of Nelson's letter. The British admiral's reply ran thus: "Lord Nelson's object in sending the flag of truce was humanity: he therefore consents that hostilities shall cease, and that the wounded Danes may be taken on shore. And Lord Nelson will take his prisoners out of the vessels, and burn or carry off his prizes as he shall think fit. Lord Nelson, with humble duty to his Royal Highness the Prince, will consider this the greatest victory he had ever gained, if it may be the cause of a happy reconciliation and union between his own most gracious Sovereign and His Majesty the King of Denmark."

The scene before Copenhagen was in some respects a repetition

of the dread sight in Aboukir Bay :



NELSON SEALING HIS LETTER TO THE CROWN PRINCE OF DENMARK (Engraving from the Painting by Thomas Davidson)

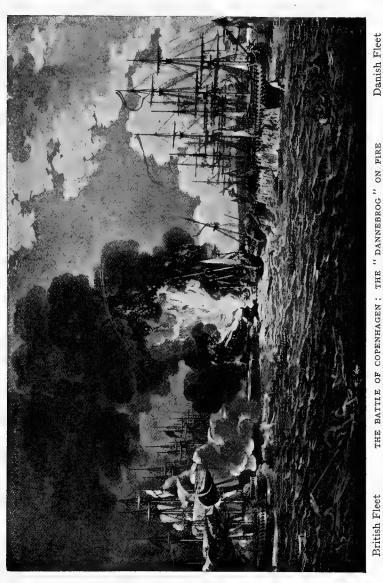
"While the sun look'd smiling bright O'er a wide and woeful sight, Where the flames of funeral light Died away."

Some of the Danish vessels had their cables cut and were drifting helplessly; and amongst them was the "Dannebrog," a floating furnace, a flaming peril to friend and foe. Her crew had been unable to fight the "Elephant," and they could not subdue the fire. The battle had ceased, but death still stalked on the waters, for the "Dannebrog" blew up and shocked the air from Copenhagen to the Swedish shore. British boats put off from all directions to pick up any of the devoted crew, but less than sixty of the 336 aboard were saved.

The British losses were not severe, considering the ordeal through which the squadron had passed; for not only had the enemy's fleet to be taken into account, but the powerful batteries in support; and either could be attacked only from a position difficult of approach. We had 255 killed and 688 wounded, or more casualties than we suffered at the battle of the Nile. The vessel in worst case was the "Monarch," resulting chiefly from the united fire of the biggest battery and the "Holstein" and "Zealand"; her losses were 56 killed, including Captain Mosse, and 164 wounded. In the heat of the engagement, and when this vessel was receiving a heavy fire, a shot struck a kettle of pork and peas. With singular coolness the men picked up the scattered food and ate and fought at the same time.

The Danes lost at the lowest estimate 1800 in killed and wounded, and several thousands taken prisoner. The cessation of hostilities was a godsend to the Danish wounded, for whom no surgeons had been provided. Doubtless it had been intended to transfer them ashore during the fight, and it had been found impracticable. When our men boarded the captured ships they found many of the mangled and mutilated Danes bleeding to death for want of proper assistance, which the British surgeons and those hurried from the shore then rendered with all speed.

Before the final negotiations were completed Nelson had an interview with the Crown Prince in Copenhagen, where the populace viewed the British admiral with a mixture of admiration, curiosity, and displeasure, but received him with respect. Nelson told the prince that his battle with the Danes was "the most tremendous of all" the 105 engagements in which he had taken part. "The French," he said, "fought bravely, but they could not have stood for one hour the fight which the Danes had supported for four." The British admiral asked that Willemoes might be introduced to him, shaking hands with the youth, and informing the prince that he ought to be made an admiral. The prince replied that if he



British Fleet

THE BATTLE OF COPENHAGEN; THE "DANNEBROG" ON FIRE (From the Engraving by P. W. Tompkins, after J. T. Serres)

made all his brave officers admirals there would be no captains or lieutenants left in the Danish service.

In England the thanks of both Houses of Parliament were voted to the officers and men of the fleet. The rewards were few, and perhaps inadequate, considering how the victory had assisted our interests. Nelson was raised to the rank of Viscount, and his rear-admiral received the Order of the Bath, several commanders were posted, and all the first lieutenants of the ships engaged were promoted to commander. No medals were issued—an omission which Nelson strongly resented.

One debatable matter should be mentioned in connection with the suspension of hostilities at Copenhagen. It was suggested at the time, and often has it been repeated, that Nelson's letter to the Crown Prince was a subterfuge in the hope of extricating his squadron from a position of grave danger. Commodore Fischer asserted that the British force was superior to his own; but, nevertheless, two of our battleships struck; some of the others were so disabled, notably the "Elephant," that they were firing only single shots for an hour before the action ended; and that in the very heat of the conflict our hero himself sent a flag of truce ashore to

propose a cessation of hostilities.

This statement, appearing in Fischer's official report, aroused the indignation of Nelson, who spiritedly replied in a letter addressed to General Lindholm: "I sunk, burnt, captured, or drove into the harbour the whole line of defence to the southward of the Crown Islands. He says that he is told that two British ships struck. Why did he not take possession of them? I took possession of his as fast as they struck. . . . He states that my flagship fired latterly only single guns. It is true: for my cool and brave fellows did not wish to throw away a single shot. The guns fired from the shore could only fire through the Danish ships which had surrendered; and if I fired it could only be in the same manner. God forbid that I should destroy an unresisting Dane! When they became my prisoners I became their protector."

General Lindholm, in his reply, smoothed over some of the points at issue by reminding Nelson, that every commander-inchief was liable to receive incorrect reports. He frankly acknowledged the Danish defeat—"but not an inglorious one." The letter concluded: "Your lordship's motive for sending a flag of truce can never be misconstrued; and your subsequent conduct has sufficiently shown that humanity is always the companion of true valour. You have shown yourself a true friend to the re-establishment of peace and good harmony between this country and Great

Britain."

After the armistice with Denmark had been fully arranged there yet remained Russia and Sweden to be overawed. If Nelson had been in supreme command of the fleet, he would at the very outset

of the operations have sent a squadron to engage with the Russian fleet in Revel Bay. Entering the Baltic on 12th April the British fleet followed a Swedish squadron to Carlserona, where Sir Hyde Parker received assurances that the King of Sweden would listen to any equitable proposals made by Great Britain. After that satis-



SIR HYDE PARKER

factory result Sir Hyde was about to sail for the Gulf of Finland, when news of the murder of Czar Paul arrived, together with the announcement that his successor, Alexander, was friendlily disposed towards us. Parker promptly returned to Copenhagen, notwithstanding the desire of Nelson to proceed to Revel, which would be calculated to impress upon the new Czar's ministers the advisability of making peace.

On 5th May Sir Hyde Parker was recalled home and Nelson was made commander-in-chief. Without delay he took the fleet to Bornholm, and, there leaving a squadron to watch the Swedes, he sailed with 10 ships-of-the-line and a couple of frigates for Revel. which he reached on the 10th, only to find that the Russian fleet had gone. The visit to Russian shores, however, bore good fruit. Nelson wrote to the emperor proposing to wait upon him personally to congratulate him upon his accession, and urging the speedy release of all British ships and subjects detained by the late Czar. The Russian ministers evinced annoyance at the presence of a British fleet in a Russian port, and would not assent to his visit to the emperor unless he came in a single ship. Russian suspicion stung Nelson into the retort, "that the word of a British admiral was as sacred as that of any sovereign's in Europe," after which he stood out to sea. But he had not gone far down the Baltic before he was met by a Russian admiral, with a communication from the Russian court, regretting any misunderstanding, promising the liberation of the British merchantmen, and inviting the admiral to St Petersburg at any time, or in any mode, he pleased. And thus came an end to the "Armed Neutrality," and with it Bonaparte's hope of weakening us at sea by the aid of the northern powers. With his great work in the Baltic Sea accomplished, Admiral Viscount Nelson was relieved by Sir Charles Pole, and returned to England in the middle of June.

We had been able to retain our command of the seas; we had kept our island home inviolate; and we had ousted the French from Egypt. But we could do nothing to check the enemy on the continent, unless we sent a large land force to co-operate with continental allies. Whatever naval victories we had won still left Bonaparte the terror and scourge of Europe; and with his great tenacity of purpose he would still make war on the water, whenever

it promised to assist his scheming ambition.

Although he had met with no success in the Mediterranean, Bonaparte now decided to despatch a squadron to Cadiz in order to prevent us from sending supplies to our Mediterranean fleet and to Malta. Rear-Admiral Linois left Toulon on 13th June, with the "Formidable," 80, "Indomptable," 80, "Desaix," 74, and the frigate "Nimron," 38, and when he had effected a junction with six Spanish sail-of-the-line under Don Moreno, Linois would be powerful enough to deal with Rear-Admiral Sir James Saumarez and his seven sail-of-the-line, that were stationed off Cadiz.

Owing to unfavourable weather, Linois had reached no further than Algeciras by 4th July, and there Saumarez found him moored in line ahead, flanked by the land batteries. The British squadron consisted of the "Cæsar," 80, six 74's and a 32. Owing to light winds only the "Pompée," "Audacious," and "Venerable" could engage the enemy for some time, but when the "Cæsar" and "Hannibal" entered the fight Linois cut his cables and ran in shore. The "Hannibal," in an attempt to follow and rake the

"Formidable," ran aground and, in spite of the crew's efforts to get her off, remained there exposed to the guns of the St Jago battery, from which she suffered terribly. As our "Venerable" and "Spencer" could not get into action owing to lack of wind, and the "Pompée" was placed disadvantageously and was being worsted by the "Formidable," Saumarez sailed out of the bay, leaving the "Hannibal" in the hands of the French. In this encounter we lost 121 men killed and 240 wounded.

The British admiral at once set about refitting his ships, but the "Pompée" was so much damaged that she had to be discarded, and her men distributed among the other ships. By the 12th the squadron was ready to venture upon a second trial with Linois, who had been reinforced by Moreno's half dozen ships, and was now sailing out of the bay, with nine sail-of-the-line and three frigates.

Saumarez, with only six ships, set out in pursuit, instructing Captain Richard Keats to make all sail with the faster "Superb," 74. At half-past eleven at night this ship was in touch with the rear of the enemy and broadsided the "Real Carlos," 112, until her foretopmast fell and she was on fire. Speeding on, the "Superb" mauled the "Antoine," 74, so severely that she surrendered a little after midnight. In this night action Captain Keats had the advantage of knowing that all the ships ahead of him were enemies, and he could not mistake friend for foe. In the case of the combined squadron there was confusion, that led to a startling disaster. "Real Carlos," now in flames, was mistaken by the "Hemenegildo," 112, for an enemy, and fired a broadside into the midst of the already distracted crew. Worse was to come, for the "Hemenegildo" fouled her burning consort, herself took fire, and both vessels blew up. Out of about 2000 souls aboard them not more than 50 were picked up.

The "Venerable," 74, and the "Thames," 32, having now come up, gave chase to the "Formidable," with which our 74 got into close action at five o'clock in the morning. The French gunners made havoc of the British rigging, which first lost her mizen topmast, and when her main-mast and fore-mast went she ran aground on a reef. The "Formidable" was quite satisfied with that result, and got into Cadiz with the remaining vessels, which Saumarez had been unable to overtake. When the "Venerable" had been got off and sent in tow to Gibraltar, the British ships hauled off and secured the single prize, the "Antoine." In this stern chase by night the "Superb" claimed chief honours. For this victory Sir James Saumarez received the Ribbon of the Bath and a pension of £1200 a year; but, strangely enough, Captain Keats went quite unrewarded.

In the last chapter were recorded some of the exploits of Lord Cochrane in the brig "Speedy," which at last met her fate in this month of July 1801. Several weeks earlier she again fell in with the Spanish "Gamo," whose twenty-two 12-pounders and 10 other guns gave her the gun-power of a frigate. Deception would not avail Cochrane a second time, and nothing remained but to give fight, athough his crew had been reduced to 54 men, the remainder

being on some recently captured prizes.

The action commenced at 9.30 with a broadside from the "Gamo." Cochrane ran under the lee of his big opponent and locked his yards with her rigging, and then with his 4-pounders, treble-shotted, gave the "Gamo" a discharge that did considerable damage and killed her captain. Shot after shot did the "Speedy's" gunners fire, and seldom without effect on the zebec's crowded decks. By elevating their guns they next threatened to blow up the Spaniard's decks, while in return the "Gamo" could not depress her guns sufficiently to work much damage to her waspish adversary. Next, the Spaniards in sheer desperation attempted

boarding, but were driven back by hot fire of musketry.

When he had lost four men, Cochrane decided that his only chance lay in boldly boarding, and pitting his 48 men against 300 in a hand-to-hand conflict. The surgeon, Mr Guthrie, took the wheel and laid the "Speedy" alongside the foe, and within a few minutes every other man of the "Speedy's" crew was on the Spanish deck, with odds of more than six to one against them. Cochrane had instructed his men to blacken their faces, consequently their diabolical appearance at first quite flustered the enemy; but desperately as fought the British tars, they would assuredly have been overpowered had not their leader employed an artifice that changed the tide of battle. He ordered one of his men to haul down the Spanish colours. Whether the foe concluded that their leader had surrendered, or whether they were willing to cry beccavi, is no matter: Cochrane had won the day, and the "Gamo" was his prize. The difficulty now presented to the victor was how to keep his 260 unwounded prisoners from rising up to recapture their ship. He proposed taking no risks, and when he had driven the Spaniards into the hold, he pointed some guns down the hatchway, intimating that a dose of canister would follow the first symptom of mutiny. By means of this drastic precaution the gallant Cochrane was enabled in due course to land his prisoners at Port Mahon.

In the following month of June the little "Speedy" again covered herself with glory in company with the 18-ton brig "Kangaroo," Captain Pulling, who evidently was a man after Cochrane's own heart. The daring couple attacked a Spanish convoy, protected by a zebec of 20 guns and three gunboats, all lying under a battery of 12 guns. Even when the Spaniards were reinforced by a 12-gun felucca and other gunboats, the two British brigs stuck grimly to their task, until they silenced the battery and sunk the zebec and three gunboats. At night the British put off in boats to complete

their work, but found that the felucca and remaining gunboats had been driven ashore.

But the days of the "Speedy" were numbered, for in July she had the misfortune to fall in with Admiral Linois off Gibraltar, when



THEIR DIABOLICAL APPEARANCE FLUSTERED THE ENEMY

he was on his way to Cadiz. Lord Cochrane manœuvred long and skilfully to avoid the enemy, but in the end was captured. It is interesting to note that Captain Brenton, under whose command the "Speedy" first gained fame, was now captain of the "Cæsar," the flagship of Admiral Sir James Saumarez who, less than a fortnight later, defeated Linois in a running midnight fight.

While Admiral Cornwallis was blockading Brest, three of his frigates, the "Doris," "Beaulieu" and "Uranie," discovered the French 20-gun corvette "Chevrette," lying at anchor under the guns of the batteries in Camaret Bay. The French captain considered himself quite secure, but the three British captains held a different opinion. On the night of 20th July a number of boats were sent into the bay to attempt to cut out the corvette, but owing to some misunderstanding the British boats got separated and had to retire. Thus warned, the French captain moved his ship further into the bay and redoubled his watchfulness. Upon the next night Lieutenant Losack headed 280 officers and men in fifteen boats. While the leader with five boats chased a guard-boat, Lieutenant Maxwell led the remaining seamen aboard the corvette after a desperate fight under a hot fire of grape and musketry. When the crew had been overpowered the cable was cut, the sails loosed, and she passed out of the bay under a heavy fire from the batteries. The capture of the "Chevrette" cost us II killed and 50 wounded.

By this time both Great Britain and France were feeling a great strain upon their resources. Bonaparte was distinctly anxious for peace, but determined to play another card that might enable him to obtain favourable terms. In the north of France he assembled a great body of troops and the ports were crowded with transports and small craft, as if with the intention of an immediate invasion of England. Although the Admiralty did not fear a French descent upon England, as long as their squadrons were locked up in harbours, Lord Nelson was placed in command of a flotilla for coast defence, after which it was believed the nation might

sleep at night without great cause for alarm.

Nevertheless, Lord St Vincent decided upon an operation against the flotilla at Boulogne, chiefly with a view to easing the popular mind. Lord Nelson had come home for his health from the Baltic, only to be engaged in onerous duties at the Nore, and now he hoisted his flag on the "Medusa," 32, Captain Gore, and stood over to Boulogne on 2nd August. The attack was made about midnight by five divisions of boats of the squadron. One division did not reach the harbour at all, and another not until nearly daylight; and the three divisions that attacked found the French fully prepared to receive them. The vessels were protected by long poles headed with spikes; they were not only very securely moored by the bottom to the shore, but they were chained together into the bargain. Every ship was packed with soldiers, the shore lined with troops, with land batteries over all. Notwithstanding a display of brilliant courage, the British attack failed. Nelson was bitterly disappointed that only part of the force could operate, otherwise, he declared, all the chains in France could not have saved their vessels.

The peace preliminaries were hastened and hostilities ceased in October; and the Treaty of Amiens was signed on 25th March



BRITISH BOATS CUTTING OUT THE "CHEVRETTE" IN CAMARET BAY

1802. We restored to France, Spain and Holland all our conquests during the war, except Ceylon and Trinidad; we promised to restore Malta to the Knights of St John; and we also abandoned the title of King of France, which our monarchs had borne since 1340. France agreed to evacuate Naples and the Papal States, and to

restore Egypt to the Porte.

Although peace had been signed, it was quite obvious that it would not be long lasting; it was not a real peace, only an armed truce. The ink was scarcely dry on the signatures at Amiens before Bonaparte was pushing on preparations for our invasion, not meant for a mere demonstration this time, but the real thing, that would place us under the despot's iron heel. At Boulogne was a huge camp of foot, horse and artillery in active training; embarking and disembarking operations were practised daily; and ships-of-the-line, frigates, gunboats and transports were preparing in all the French ports. And in Great Britain all necessary measures were

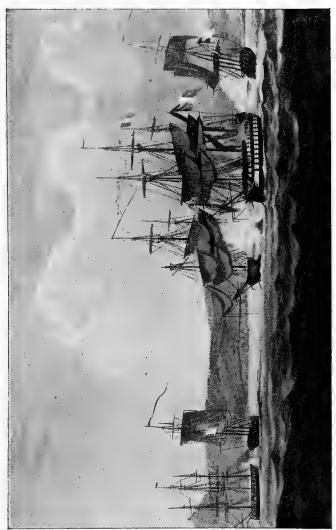
being taken to cope with the gathering danger.

As Bonaparte was riding rough-shod over the treaty in various ways, the British Government decided to retain Malta. This action of ours stood in the way of the French re-occupation of Egypt, which was part of their programme; and in May Bonaparte notified Great Britain that refusal to evacuate Malta would be viewed as a casus belli. Our response was a declaration of war on the 16th. It came too promptly for the liking of the First Consul, who would have preferred another year in which to complete his preparations. the very next day Admiral Cornwallis sailed with a squadron to resume the blockade of Brest, and a day later Lord Nelson left our shores in the "Victory" to take charge of the Mediterranean station, with Sir Richard Bickerton as second-in-command. All French trading ships found in our harbours were seized, while on his part Bonaparte detained as prisoners of war any British subjects in France and Holland; and he invaded Hanover, which at that time formed part of the dominions of George III.

The year 1804 was a particularly trying period for those who were engaged in the active defence of Great Britain. During the brief cessation of hostilities France had been building ships with furious speed; and their coast was now divided into six naval districts, whose chief ports were Brest and Havre on the north, Lorient and Rochefort on the west, Toulon in the Mediterranean, and Antwerp in Holland; and in addition to these there was the

main depot at Boulogne, which "was like a wasp's nest."

All these points of French activity had to be watched closely by divisions of the British fleet. A large number of small vessels, each armed with one or two heavy guns, were collected at the Nore; ships-of-the-line, too old for service with the blockading squadrons, were stationed at various ports to act as floating batteries; martello towers were erected along our shores; and regulars, militia



REPULSE OF THE "MARENGO" AT VIZAGAPATAM

and volunteers were massed in readiness to act when danger called.

While we waited with intense anxiety for the tyrant of Europe, now Emperor of France, to commence his great move against us, British ships in all the seas of the world attacked anything and everything that flew the tricolour; there were boat and frigate actions innumerable, for which space will not permit the barest mention, without encroaching upon the main events, which now followed each other in rapid succession.

A notable exploit of the year was Nathaniel Dance's encounter with Admiral Linois in the East Indies. Dance had charge of 16 East Indiamen and a dozen smaller vessels on their way from China to Europe. Although the merchantmen mounted guns, they were only of light calibre for repelling pirates. On 14th February Linois of set purpose intercepted this China fleet with the "Marengo," 74, three frigates and a gun brig. Dance, though only a senior captain, flew a commodore's pennant in the "Earl Camden." He very promptly formed his fleet in line of battle in close order and hove to for the night. On the next day the China fleet made sail on the larboard tack, and Linois stood towards with the intention of attacking the rear. When Dance perceived this movement, he signalled for his ships to tack in succession, which brought him towards the enemy. If the commodore had so many warships under his command the manœuvre could not have been carried out more skilfully. Présently the "Marengo" opened fire on the two leading ships, the "Royal George" and the "Ganges," and to the surprise of Linois the compliment was returned with both spirit and interest. For three-quarters of an hour the engagement continued, and then the French admiral stood off and sailed away. Upon his return to England, Dance was knighted by the King, and officers and men were handsomely rewarded by the East India Company for preserving their fleet from the French.

In the following September the "Marengo" and a couple of frigates attacked our 50-gun ship "Centurion," while she was waiting to convoy two merchantmen from Vizagapatam. The British ship more than held her own and the Frenchmen hauled off after they had captured one of the merchantmen, owing to her skipper not cutting her cable and coming closer in as the captain of the "Centurion" ordered.

In the West Indies the Dutch colonists had surrendered to us in Demerara, Essequibo and Berbice. During the five years that we held them the planters thrived under British rule, and it was no fault of theirs that they were restored to Holland in 1802. Consequently when war broke out afresh they were quite ready to fall again into our hands. Surinam was only surrendered to a British squadron under Commodore Samuel Hood with 2000 troops under Major-General Sir Charles Green.



THE ' MERCEDES' BLOWING UP

Since the peace of Amiens Spain had not entered into any active hostilities against us, but we knew she was bound by agreement to supply France with fifteen sail-of-the-line upon demand. Bonaparte now threatened Spain with invasion unless she declared war against Great Britain, and the unhappy country commenced her

preparations to take up arms against us.

The British Government did not wait for Spain to declare her intentions formally, but forthwith gave her warning. A great deal of the Spanish revenue still came from South America and a squadron of treasure ships, in charge of Admiral Bustamente with four frigates, arrived off Cape Santa Maria on 4th October. To their surprise they were intercepted by four British frigates, despatched by Admiral Cornwallis to hold them as hostages. The Spaniards were given the choice of surrendering, or fighting it out there and then. If the demand had been made by a ship-of-the-line the Spanish admiral might have yielded under protest, but professional pride forbade submission to vesssls of his own number and about his own class. He proceeded on his way until a shot across his bows brought on a general action. It was sharp and decisive. One of the Spanish frigates caught fire and blew up, and the other three surrendered, and very valuable prizes they proved. Our losses were only 2 killed and 7 wounded, while the Spanish suffered 100 casualties, in addition to several hundreds who perished in the blowing-up of the " Mercedes."

There was at once a great outcry in Spain, followed by a declaration of war on 12th December. It did not greatly perturb Great Britain, for the declaration would have come, sooner or later, in any case. It meant the addition of 37 large sail-of-the-line against us, but we had taken our chances on the water before, and we were prepared to do so again. It meant that Nelson, Cornwallis, Collingwood, Cochrane, Calder, Orde and our other sea-captains had got more responsibility thrust upon them, calling for doubled vigilance against the greater odds. The nation could be grateful that its fate lay in the hands of a devoted band of seamen "whose hollow oak their palace was, their heritage the sea."

CHAPTER XIX

"'TWAS IN TRAFALGAR'S BAY"

SINCE the declaration of war in May 1803, Lord Nelson with eleven sail-of-the-line had been blockading Toulon, where lay a fleet of twelve sail under Admiral Villeneuve. To maintain a blockade in the Mediterranean was much more arduous than a similar operation in the Channel, where a vessel could return to our own shores to revictual or refit, and be back with the squadron in two or three weeks. To send ships home from the Toulon station was out of the question, and Nelson said that, even when he was forced to send one to the nearer Malta, he never saw her again under two months. The provision of water for blockading ships was one of the greatest difficulties, for not more than 90 days' supply could be carried aboard; and fresh vegetables were very necessary for

health's sake, and especially to ward off scurvy.

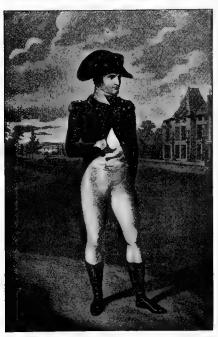
Nelson's retiring place for fresh water, refitting, etc., was Agincourt Sound in the Madalena Islands, 200 miles from Toulon; and when he went thither he would leave a couple of frigates to keep up the vigil until his return. History generally neglects to remark upon the constancy and alertness shown by our officers and seamen during the many weary months of waiting, until Bonaparte felt that he was ready to put his plans into effect. It was our handfuls of service-weary, storm-tossed ships in widely scattered spots, on which Bonaparte and his conquering armies never looked, that really stood between them and their vast ambitions. The great battle of Trafalgar "was in reality a campaign and not a single contest "; it was the winning stroke of a duel that had lasted the best part of three years, between the greatest military genius of the century, who endeavoured to marshal squadrons at sea as if they were battalions on land, and "a handful of British officers, whose skill, energy, endurance, and tenacity foiled him in his purpose."

At the commencement of the year 1805 Bonaparte had got together a vast army of 150,000 men ready for embarking on board a flotilla of 2300 miscellaneous craft. He declared that "he needed to be master of the sea for only six hours to terminate the very existence of England"; and to that end he planned to entice the British squadrons from the Channel and replace them with French.

His fleet would then be able to cover his landing in England, where his march on London would be the beginning of the end for the little

nation that had the temerity to thwart his aspirations.

Bonaparte's scheme was for the Brest, Toulon, and Rochefort squadrons to break out of their respective ports at about the same time and proceed to the West Indies, with Martinique as the rendezvous, after various British possessions had been reduced. The French fleet, with fifty or more sail-of-the-line, would then return



NAPOLEON BONAPARTE (From the Painting by Isabey)

to the Channel and sweep it clear of opposition, so that the troops could cross over from Boulogne to England. The French felt assured that Nelson would follow Villeneuve to the West Indies, where it would not be difficult to give him the slip and return to Europe by an unusual route, and thus, with Nelson out of the way, the sweeping of the Channel would be facilitated.

The French scheme sadly miscarried. Cornwallis was far too watchful and too strong for Vice-Admiral Ganteaume to risk leaving Brest. On 11th January 1805, Admiral Missiessy, taking advantage of a gale, got out of Rochefort with four 74-gun ships, three frigates and two brigs, having 3500 troops aboard. Making straight for the West Indies,

the French admiral captured Roseau, the capital of Dominica, where he destroyed all munitions of war and levied a contribution of £5500. At St Kitts he obtained £18,000, and at Nevis £4000. When Missiessy arrived at Martinique, there was no news of either the Brest or Toulon squadrons, and, after waiting the prescribed time, he returned to France, and regained Rochefort without encountering any British opposition, either on his way out or return.

While Nelson was at Madalena, Villeneuve put to sea on 18th January 1805, and the next day, having been warned by his two frigates, Nelson set out in pursuit, first going to Sardinia and then to Alexandria. Villeneuve's ships, however, having suffered consider-

able damage in a gale, he returned to Toulon after an absence of only a few days. This news reached Nelson in the middle of February, when he was off Malta, and, with his anxiety relieved, he made for the Spanish coast, and at Palmas re-victualled his fleet from store

ships.

Villeneuve again set sail on 30th March, and five days later Nelson heard that the enemy was at sea. Knowing nothing of the Toulon fleet's intention to cross the Atlantic, the British admiral searched the coasts of Italy, Sicily, and Sardinia without avail, being seriously inconvenienced by his lack of frigates. Not until April 18th did he hear that the French fleet had been seen 300 miles to the westward, ten days earlier, when he immediately surmised that the destination might be the West Indies, whither he would follow, if his surmise were correct. At Gibraltar, on 6th May, Nelson ascertained that a French fleet had passed through the strait more than four weeks previously. At Lagos Bay there was additional news: Villeneuve had swept aside Sir John Orde's small squadron, and, when six Spanish ships joined him, had sailed for the west.

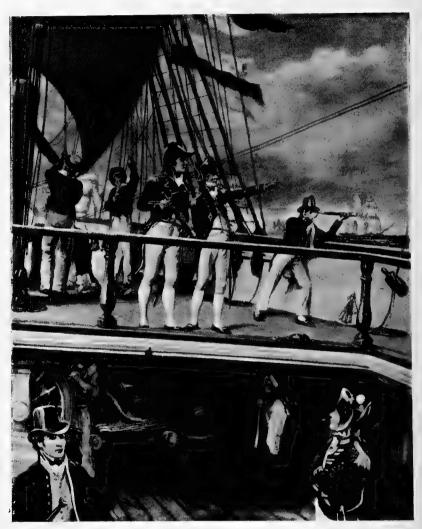
On roth May Nelson set out across the Atlantic, arriving at Barbadoes on June 4th; and as Villeneuve did not reach Martinique until 4th May, the British admiral had discounted some of the enemy's thirty-five days' start. Nelson scoured the West Indian waters in search of Villeneuve, sometimes being misled by accident and in other cases being deceived of set purpose, the captain of an American brig, for example, sending the British ships on a wild-goose chase to the Gulf of Paria. Ultimately Nelson ascertained definitely that Villeneuve had returned to Europe, and thither he followed, but took the precaution of sending ahead the brig "Curieux" to convey the news to England. Nelson reached Gibraltar on 19th July. Here he went ashore, the first time he had set foot on land for two years.

Meanwhile Villeneuve was nearing home. He proposed to pick up a few Spanish ships at Ferrol, and then endeavour to join with the French fleet at Brest. But the "Curieux" had reached England on 7th July, and the Admiralty at once despatched five of our ships off Rochefort to join the ten vessels that were under Sir Robert Calder off Ferrol. With this force of fifteen ships and a couple of frigates, the British admiral was to take up his station about 100 miles west of Finisterre, where he could hardly fail to intercept

Villeneuve.

On 22nd July Calder met Villeneuve with his 20 sail-of-the-line and 7 frigates. Not only were light winds prevailing, but a fog for some time partly veiled the hostile fleet. The "Hero," 74, Captain Hon. Alan Gardner, engaged with the "Argonauta," and the ships astern of her tacked in succession. The firing became pretty general, but for the most part was distant and not very effec-

tive, owing to the fog. The "Barfleur," 98, Captain George Martin, however, was well placed to tackle the "San Rafael," 80, which was



NELSON LOOKING OUT FOR THE FRENCH FLEET

so disabled that she surrendered in little over half an hour. The "Firme," 78, also hauled down her colours; and the "Altas," 74, and "Espana," 64, would have had to follow suit, but for the strenuous assistance of their consorts. By the time darkness

descended, the British squadron was considerably scattered and Sir Robert discontinued the action. Our total losses were 4x killed and 162 wounded. The French suffered much more severely, for

the "San Rafael" alone lost 53 killed and 114 wounded.

On the following day the fog had not lifted appreciably and the two admirals went on their separate ways, Calder to attach himself to Cornwallis off Brest, while Villeneuve put into Vigo and afterwards joined with the Ferrol fleet. Sometime afterwards Sir Robert Calder was court-martialled and reprimanded for not bringing the enemy to more decisive action, and failing to carry out his instructions to prevent Villeneuve from effecting a junction with the ships at Ferrol. On the 22nd Calder, with only fifteen ships, captured two of the enemy's twenty and so badly damaged three others that they were no longer fit to keep the sea. He had to think also of the enemy at Ferrol and Rochefort, either division being likely to come to Villeneuve's aid. In fact Admiral Allemande did put out with the Rochefort ships, and Villeneuve sent from Corunna the "Didon" frigate with instructions for Allemande to meet him off Brest; but the "Didon" failed to deliver the message, simply because she fell in with the British 40-gun frigate "Phœnix," who captured her after a sharp action.

Villeneuve's failure to join Ganteaume's force at Brest made the huge camp at Boulogne a laughing-stock, even if the soldiers were not wanted shortly to guard their own frontiers against Austria and Russia, whom Pitt had induced to take up arms against France. But although the army of invasion was being dispersed, the French

fleets still remained to plague and menace us on the sea.

On 13th August Villeneuve sailed with 29 ships-of-the-line and made a weak attempt to make for Brest in accordance with the plans of Bonaparte. But the wind was unfavourable, there was sickness among his men, and he realised that by this time the British would be fully prepared to meet him, instead of being taken by surprise. He, therefore, decided to steer for Cadiz; and in consequence earned Bonaparte's frankly expressed contempt for his faint-heartedness.

It will be well to follow Nelson's movements in the meantime. He stayed at Gibraltar only two days after his arrival from the West Indies, and then set out for the Channel, but first taking counsel with Collingwood off Cadiz. The latter thought that when Villeneuve had picked up the Ferrol fleet he would call for the Rochefort ships, and then be in a position to force a junction with Ganteaume at Brest. With that great fleet he believed the enemy would make for Ireland, where they had attempted invasion upon previous occasions. The result was that Nelson first inspected the Bay of Biscay and then stood over to the north-west coast of Ireland. Neither seeing, nor hearing, anything of the enemy, he decided to add his ships to Cornwallis's squadron off Ushant, the

better to cope with Villeneuve if he should bear down upon Brest. Nelson arrived off Ushant on 15th August and, still being unable to learn anything of the enemy, his lordship proceeded with the "Victory" and "Superb" to Portsmouth.

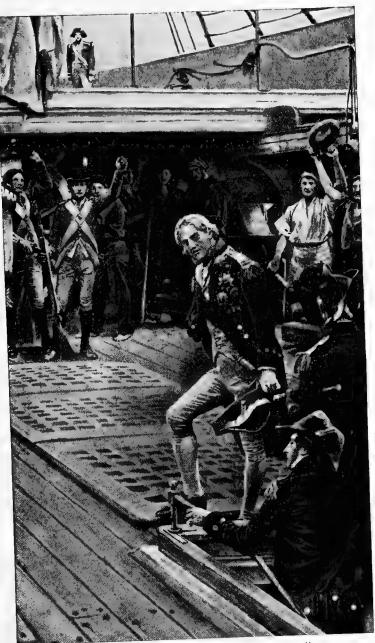
On 20th August Collingwood was no longer in doubt concerning the whereabouts of Villeneuve, for he put into Cadiz with his twenty-nine ships, the British admiral with only three sail-of-the-line being unable to make any demonstration against him. Without delay Collingwood despatched the frigate "Euryalus," Captain Hon. H. Blackwood, to England, to convey the important news. The very next day Collingwood was reinforced by four ships, and a week later Calder brought others; and with this force "Coll" settled down to watch Villeneuve, eaten up with anxiety lest the enemy should put to sea before Nelson arrived.

Blackwood reached England on the evening of September 1st with Collingwood's despatch to the Admiralty. He lost no time in posting to London, calling on his way at Merton in Surrey, where Nelson had been resting on his small estate after more than two years' strain and anxiety afloat. The next day Nelson interviewed Mr Pitt and Lord Barham, now First Lord of the Admiralty, who gave him his own choice of ships and officers. Frequently during the succeeding fortnight Nelson was at the Admiralty, and upon one occasion there met for the first and last time Sir Arthur Wellesley, afterwards the Duke of Wellington.

Nelson left Portsmouth in the "Victory" on 15th September. The whole population turned out to see the famous admiral depart. "Ancient mariners who had fought under Boscawen and Hawke, under Keppel and Rodney, reverently stood hat in hand as they recognised, in the shattered frame of the hero of the Nile and Copenhagen, a greater warrior than any under whom they had served. Many of the spectators were moved to tears; some knelt before him as he passed along the Southsea beach, and invoked blessings and Heaven's protection on his head."

At Plymouth Nelson was joined by two other ships, and just within a fortnight he arrived off Cadiz. Before joining Collingwood he sent ahead the "Euryalus" with instructions that he was not to be saluted, nor were any colours to be displayed; and thus the enemy would not be apprised of the arrival of a British reinforcement, and to that same end he kept the "Victory" out at sea nearly twenty leagues from land. Nevertheless Villeneuve heard of Nelson's arrival, and about the same time still more unpalatable news reached him, that the enraged emperor was sending an admiral to supersede him. Villeneuve decided that his only chance of restoration to favour lay in putting out to sea and inflicting a defeat upon the British.

For three weeks Nelson kept watch with his old and close friend Collingwood. No couple of admirals in the Navy had greater admira-



NELSON COMING ON DECK ON THE "VICTORY"

tion and respect for each other. They had been reared in the same school from the beginning of their service. When, twenty-eight years earlier, Lieutenant Nelson left the "Lowestoffe" for the "Bristol," he was succeeded by Lieutenant Cuthbert Collingwood, and when in the next year Nelson became commander of the brig



NELSON MAKING HIS WILL—CAPTAINS HARDY AND BLACKWOOD WITNESSING IT

"Badger," again Collingwood stepped into his shoes on the "Bristol." On 9th October we find the commander-in-chief sending to Collingwood what he called the "Nelson-touch." After detailing the plan of attack as far as the position of the enemy could be calculated, the letter concluded: "We can, my dear Coll, have no little jealousies. We have only one great object in view, that of annihilating our enemies, and getting a glorious peace for our country. No man has more confidence in another than I have in you; and

no man will render your services more justice than your very old friend Nelson and Bronte."

The British fleet, having received additions from time to time, consisted of over thirty ships, but Sir Robert Calder being recalled to England to undergo a court-martial for his recent failure, he was allowed to go back in his own 90-gun ship, the "Prince of



NELSON'S LAST PRAYER

Wales." Nelson believed that Sir John Orde and Calder were the only two enemies he had ever had among his brother commanders; and it was a very honourable consideration for Calder's feelings that caused the commander-in-chief to rob his fleet of a powerful ship at a critical time. More than that, it was necessary for the ships to go in detachments to Gibraltar for provisions and water, and on the 3rd, Rear-Admiral Louis, on the "Canopus," went on this errand with five other ships. In all probability Villeneuve was made acquainted with this weakening of the British force. He and his Spanish colleague, Admiral Gravina, had reorganised and

supplied the combined fleet, and on the 20th they were out at sea. Villeneuve was confident that he was sufficiently strong to meet the enemy, for he wrote to Admiral Decres, the French Minister of Marine, that "Napoleon should soon be satisfied and might reckon on the most splendid success." Nelson, having been signalled that the enemy had left harbour, and judging that Villeneuve would make for the Mediterranean, stood towards Gibraltar. Soon after daybreak on 21st October, the allied fleet was descried, heading south: but a few hours later the direction was reversed, probably with an idea of being nearer to Cadiz, in case of disaster following encounter with the British. Owing to the wind being unfavourable for the reversing movement, the manœuvre upset the proper order of Villeneuve's ships. The long single line became an uneven curve of nearly five miles from end to end with the vessels at irregular intervals, some abreast of each other, some many hundreds of yards apart. Very different was the disposition of the British ships, ranged in two rigid parallel straight lines about a mile apart, in readiness for the battle that the enemy now would not be able to avoid.

The following were the British ships-of-the-line in battle order, the lee division with its three extra ships extending a considerable distance astern:

BRITISH FLEET

Port, or Weather Division

		,	,
Ship.		Guns.	Officer in Command.
" Victory "		. 100	Vice-Admiral Lord Nelson
			Captain T. M. Hardy
" Téméraire "		. 98	" Eliab Harvey
" Neptune "		. 98	,, Thomas Freeman
" Leviathan "		· 74	,, Henry Bayntun
"Conqueror"		· 74	" Israel Pellew
" Britannia		. 100	Rear-Admiral Lord Northesk
			Captain Charles Bullen
" Agamemnon	,,	. 64	,, Sir Edward Berry
" Africa "		. 64	,, Henry Digby
" Ajax " .		· 74	" John Pinfold (acting)
" Orion "		· 74	,, Edward Codrington
" Minotaur		· 74	,, Charles Mansfield
"Spartiate"		· 74	" Sir Francis Laforey

Lee Division

[&]quot;Royal Sovereign" . 100 Vice-Admiral C. Collingwood Captain Edward Rotheram

							317
Ship.			G	uns.		Officer in Command.	
" Belleisle"				74	Captain	William Hargood	
" Mars "				74	2)	George Duff	
"Tonnant"	•			80	,,	Charles Tyler	
"Bellerophon"	,			74	,,	John Cooke	
" Colossus				74	,,	James Morris	
" Achille				74	,,	Richard King	
" Dreadnought				98	,,	John Conn	
"Polyphemus"	,			64	,,	Robert Redmill	
"Revenge"				74	,,	Robert Moorsom	
"Swiftsure"				74	,,	George Rutherford	
" Defiance "	•			74	,,	Philip Durham	
"Thunderer"		•		74	"	John Stockham (act	ting)
" Defence "	•		•	74	"	George Hope	
" Prince "		•	•	98	,,	Richard Grindall	

Frigates.—"Euryalus," 38, Captain Blackwood; "Naiad," 38, Captain Dundas; "Phœbe," 36, Captain Bladen Capel; "Sirius," 36, Captain Prowse; the schooner "Pickle" and the cutter "Entreprenant."

The combined squadrons of the allies comprised the following

ships, commencing with the headmost:

FRENCH AND SPANISH FLEET

Ship.	Nationality.	Guns.	Officer in Command.
" Neptuno".	Spanish	74	Captain Valdes
"Scipion".	French	74	,, Beranger
"Rayo"	Spanish	100	,, Macdonel
" Formidable".	French	80	Rear-Admiral Dumanoir
			Captain Letellier
" Duguay "			
Trouin ".	French	74	" Touffet
" Mont Blanc	French	74	,, Villegris
" San Francisco			
de Asis'' .	Spanish	74	,, Flores
"San Augustin"	Spanish	74	,, Cagigal
" Héros "	French	74	,, Poulain
" Santissima			
Trinadad ''.	Spanish	130	Rear-Admiral Cisneros
			Captain Triarte
"Bucentaure".	French	80	Vice-Admiral Villeneuve
			Captain Majendie
"Neptune".	French	80	" Maistral
"San Leandro"	Spanish	64	" Quevedo

300	THE BRITISH NAVY			
Ship.	Nationality.	Guns.	Officer in Command.	
" Redoutable " .	French	74	Captain Lucas	
" Intrépide " .	French	74	,, Infernet	
"San Justo".	Spanish	II	,, Gaston	
" Indomptable "	French	80	,, Hubart	
"Santa Ana".	Spanish	112	Vice-Admiral Alava	
			Captain Gardoqui	
"Fougueux".	French	74	,, Beaudoin	
" Monarca " .	Spanish	74	,, Argunosa	
"Pluton".	French	74	,, Kerjulien	
" Algésiras " .	French	74	Rear-Admiral Magon	
			Captain Brouard	
"Bahama".	Spanish	74	,, Galiano	
" Aigle "	French	74	,, Gourrége	
"Swiftsure".	French	74	,, Villemadrin	
" Argonaute " .	French	74	,, Epron	
" Montanez " .	Spanish	74	" Salcedo	
" Argonauta " .	Spanish	80	" Parefas	
"Berwick".	French	74	,, Filiol Camas	
"San Juan				
Nepomuceno ''	Spanish	74	,, Churruca	
"San Ildefonso"	Spanish	74	,, Burgas	
" Achille " .	French	74	" De Nieuport	
" Principe de				
Asturias '' .	Spanish	112	Admiral Gravina	
			Rear-Admiral Escano	

The frigates were all French: "Cornélie," "Hermione," "Hortense," "Rhin," and "Thémis."

It will be seen that while the British ships numbered 27 with 2148 guns, the enemy's ships were 33 with 2620 guns. The discrepancy apparently did not worry Nelson, for more than once he assured Captain Blackwood, who was aboard the "Victory" with the other frigate captains, that he should not be satisfied with less than twenty prizes. It was suggested to the Commander-in-chief that he should wear a less conspicuous dress, and that he should direct the fight from aboard the "Euryalus" instead of getting into the thick of it; but neither proposal pleased Nelson, who was bent upon leading his fleet into battle.

The British plan was to crush the enemy's rear with the lee line, while the weather line would tackle the van, so that when the battle became general the British ships would surround the foe. Nelson, Collingwood and Northesk and the captains had discussed the tactics so thoroughly, that during the battle there was no necessity for many signals; in fact only three were made concerning the order of the battle, and those issued very quickly after sighting the enemy's fleet: (I) "Form order of sailing in two columns";

(2) "Prepare for battle"; (3) "Bear up in succession on the Admiral's course;"

Owing to the light wind the British ships neared the enemy only at the rate of about two knots an hour, and Nelson meanwhile was visiting the gunners of the "Victory" at their quarters, warning them to make sure of their aim before firing. When he perceived Villeneuve's reversing manœuvre, he had signalled to Collingwood that he intended to cut through the van of the enemy's line, in order to prevent a return to Cadiz.

About II.30 Nelson asked Blackwood if he did not think a signal was still wanting, to which the captain replied that he believed the whole fleet understood exactly what was required of them. Then did our great admiral give orders for the hoisting of the ever-memorable and world-famous signal, that emboldened the heart and stiffened the muscles of every British tar, as enthusiastic cheers rang

throughout the fleet.

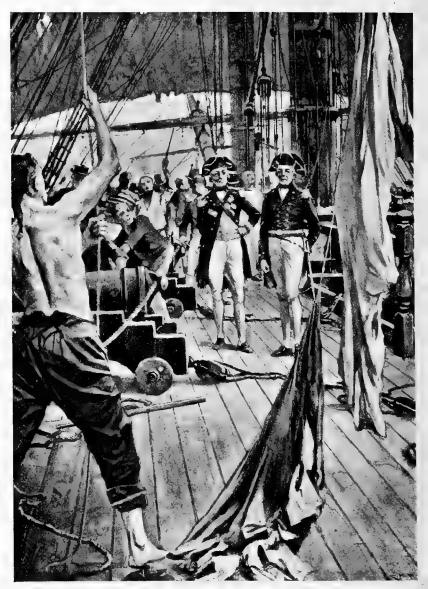
As the fluttering flags spelt out: "England expects that every man will do his duty," Nelson said, "I can do no more. We must trust to the Great Disposer of all events, and the justice of our cause. I thank God for this great opportunity of doing my duty." A few minutes later he was shaking hands with Blackwood, for the captains of the frigates were returning to their ships. Blackwood expressed the hope that he would soon be back to find the admiral well, and in possession of his twenty prizes. Nelson answered: "God bless you, Blackwood; I shall never see you again." Even before he left England the admiral had a premonition that he would fall in the impending battle, and he visited his upholsterer in London, and expressed the belief that he would shortly have occasion to use the coffin, which Captain Hallowell presented to him after the battle of the Nile.

Nelson had already made his will, which was witnessed by Captains Hardy and Blackwood. The admiral next retired to his

cabin, where he wrote this beautiful prayer:

"May the Great God, whom I worship, grant to my country, and for the benefit of Europe in general, a great and glorious victory; and may no misconduct in any one tarnish it; and may humanity after victory be the predominant feature in the British fleet! For myself individually, I commit my life to Him that made me, and may His blessing alight on my endeavours for serving my country faithfully! To Him I resign myself, and the just cause which is intrusted to me to defend. Amen, Amen, Amen."

The lee division was ahead with the "Royal Sovereign" leading, and at this ship the "Fougeaux" fired the first shot, which was the signal for the British ships to hoist their colours. At 12.15 the "Royal Sovereign" broke through the enemy's line, pouring a tremendous broadside into the stern of the "Santa Ana," as



HOISTING THE FAMOUS SIGNAL

Collingwood passed to take up his station on her starboard bow. While the "Royal Sovereign" got into close engagement with the big three-decker, the "San Leandro" ahead, and the "Fougeaux" on her quarter, gave our 100-gun ship a trying time, to say nothing of the "San Justo" and "Indomptable" also joining in. For nearly two hours the gunners of the "Royal Sovereign" stuck grimly to their task, and then the "Santa Ana" surrendered. She had lost her mizen-topmast in the first few minutes, and forty minutes before she struck, her three masts fell over the side. The "Royal Sovereign" had lost her mizen-mast, and later her main mast went over the side, taking two lower deck ports with it; and her foremast was tottering almost to a fall.

The "Belleisle," following Collingwood, got a warm reception from the enemy's rear ships before she also fired double-shotted guns into the "Santa Ana's" stern. She then passed on to return the fire of four ships in succession. She had lost her mizen-topmast before she reached the "Santa Ana," and at I o'clock her maintopmast went over the side. Captain Hargood was now in a critical condition, for several of the enemy were pressing forward. "Fougeaux" came up and shot away the "Belleisle's" mizenmast and then gave way to the "Achille," which commanded the British starboard side, while the "Principe de Asturias" attacked her rear, and the "San Justo" and "Leandro" opened on her bows. About 2 o'clock the "Belleisle's" mainmast snapped close to the deck, about which time the "Neptune" was threatening her on the starboard bow. At the end of another forty-five minutes the "Belleisle" lost her foremast and bowsprit, and her guns could no longer be worked owing to being masked by wreckage. Although she lay like a log in the water her defiant crew refused to strike, affixing an ensign to the fallen topsailyardarm, while a boarding pike, with a Union Jack attached, was lashed to the stump of the mizen-mast. Captain Hargood had been wounded by a splinter. Half stunned and excited, he shouted: "Let 'em come on, let 'em all come on. I'm d-d if I'll strike! No, never-to nobody whatever." This was repeated on the decks in the pauses of firing and elicited the hearty guffaws of the old fire-eater's men. At a quarter past three the "Polyphemus" came to the spot, and interposed between the "Neptune" and the cripple; the "Defence" engaged the "Aigle," and the onslaught of the "Achille" was checked by the "Swiftsure," whose crew in passing mounted the rigging, and gave ringing cheers for the gallant fellows of the "Belleisle," who responded with gratitude and enthusiasm.

As the "Mars" came into action she was raked by four of the enemy's ships, before she got to action with the "Pluton," and later she was raked again by the "Monarca" and "Algésiras." When the "Tonnant" came to her assistance, the "Mars" fought fiercely with the "Fougeaux" and "Pluton," suffering severely in the one-

sided contest and losing her gallant Captain Duff, who was beheaded by a round shot. Other British ships coming to the rescue, the

"Fougeaux" and "Pluton" drew off.

The "Tonnant" was now free to haul up alongside the "Monarca," after raking her with a broadside from close astern. After only a brief action the Spanish ship struck, but shortly rehoisted her colours. Next, the "Tonnant" ran the "Algésiras" aboard and, while engaged with her on the starboard side, her larboard guns plied the "Pluton" and "San Juan Nepomuceno." About this time Captain Tyler was wounded severely, and Lieutenant Bedford fought the ship in his stead. When both the "Tonnant" and "Algésiras" were suffering from damaged masts, the Frenchmen endeavoured to board the British 74, but were repulsed hotly, and the "Algesiras" surrendered. Half an hour later the "San Juan" struck, and Lieutenant Clement and a couple of tars went off in the jolly-boat to take possession. About midway a shot swamped the boat, to which the lieutenant clung until another shot turned her bottom upwards. The officer remained there, while one of his men swam back to the "Tonnant" for a rope, with which the lieutenant was drawn aboard. Having now no boat left, the "Tonnant" had to leave the prize, which later on fell to the "Dreadnought."

The "Bellerophon," the fifth of the lee ships to get into action, not only engaged with the "Monarca" and "Aigle," one on either side, but three other of the enemy's ships fired into her until her main and mizen-topmasts fell over the side and her sails were on fire. Captain Cooke and her master were killed, and Lieutenant Cumby was in command when the "Colossus" and other ships came to render assistance, and the "Monarca" surrendered, Cumby

taking possession of her.

No British ship suffered more losses than the "Colossus." She got alongside the "Argonaute," and pounded her until she dropped astern. Meanwhile she had to endure the fire of the French "Swiftsure" and the "Bahama." The "Swiftsure" endeavoured to pass under the stern of the "Colossus," but Captain Morris wore round and shot away his opponent's mizen-mast, while the "Orion," in passing, fetched down her mainmast, which caused the Frenchman to surrender. Captain Morris was wounded above the knee, but refused to go below until the action was at an end, when it was necessary for the "Agamemnon" to take the "Orion" in tow. The losses of the "Colossus" were terrible, viz., 40 killed and 160 wounded, testifying to her strenuous share in the fight.

The British "Achille" first engaged with the "Montanez" and then closer still with the "Argonaute." After a hot encounter the vessels separated, when the "Achille" found her French namesake on her quarter and the "Berwick" on her starboard. The French "Achille" receiving sufficient punishment for the present,



THE "VICTORY" GOING INTO ACTION AT TRAFALGAR (After De Martino)

passed on, whereas had she remained the "Berwick" might not have struck at the end of another hour.

The "Dreadnought" was fortunate enough to get into action with the "San Juan Nepomuceno," which had already been engaged successively by the "Bellerophon," "Defiance," and "Tonnant." The Spaniard met her fate in the "Dreadnought," who ran her aboard and caused her to strike at the end of a fifteen minutes' action.

The "Polyhemus" and "Swiftsure" similarly met an easy prey in the French "Achille," after her encounter with the British ship of the same name. The French 74 was speedily in a bad way, and when her mizen-mast and foreyard had gone and her rigging was in flames, she ceased firing and struck; and after the battle was over she blew up. On the "Achille" there was a young Frenchwoman, wife of a maintop-man. To escape the flames she got through a gun-port and sat on the rudder chains. Burning lead then dropped upon her; she stripped, jumped into the sea and swam to a spar. She was rescued by a British boat and put aboard the "Revenge," where she made herself a skirt out of a couple of seamen's shirts, and apparently was quite happy.

The "Polyphemus" and "Swiftsure" did not have more than a score of casualties between them, whereas the "Revenge" lost nearly 80 in killed and wounded, and yet failed to take a prize. She was, however, in the hottest of the fight. She first got locked up aloft with the "Aigle," which she cruelly raked before she forged ahead to be engaged at once by the "Principe de Asturias," "Indomptable," and "San Justo." She suffered tremendously from this trio, until the "Dreadnought" and "Thunderer" created

a diversion in her favour.

The "Defence" engaged with the "Berwick" and then with the "San Ildefonso," which latter struck her flag at the end of sixty minutes. The "Thunderer," when going to the assistance of the "Revenge," treated the "Principe de Asturias" to several very effective broadsides, and when the French "Neptune" (there were three "Neptunes" in the battle) came up, she engaged her, too. So deadly was the aim of the "Thunderer's" gunners that both foes bore away towards Cadiz; but Admiral Gravina's ship had suffered so severely, that her main- and mizen-masts fell before she made her haven.

The captains of the "Ajax" and "Thunderer" had gone to England to give evidence in the trial of Sir Robert Calder, who also desired Captain Durham to accompany him. The captain of the "Defiance" refused to miss the battle, in which he worthily fought his ship. Closing in and lashing to the crippled "Aigle," Durham boarded her, but his seamen were unable to make good in the face of the terrible musketry fire from her tops, waist, and forecastle. Cutting the lashings, the "Defiance" sheered off, and opened such a

destructive fire on the enemy that she struck, and a possession party went aboard.

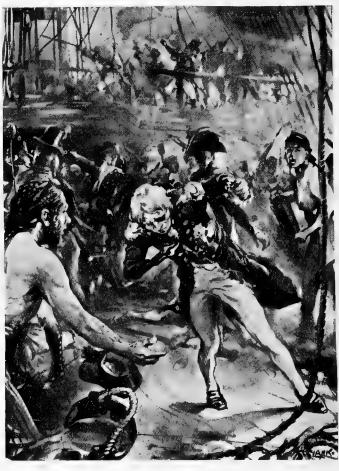
Now to consider how, meanwhile, the port division had entered into the fray. Under all her sail the "Victory" led her column, eight or nine ships of the enemy ahead, or across her bows, firing single shots at her to get their range. When at length a shot went through her main-topgallant-sail, the single shots became broadsides, aimed chiefly at her rigging to disable her before she could get to close quarters. Presently Dr Scott, Nelson's secretary, was killed while talking to Captain Hardy, followed by the mizentopmast being shot away, while her wheel was smashed, and cannon shot swept the decks. On the poop eight marines were killed by one ball, splinters were flying around, one of them bruising Hardy's foot.

Although she had lost 50 men in killed and wounded, and her sails were in ribbons, the "Victory" came on grimly silent, unable to answer the cluster of ships ahead with a single shot. But the gallant ship's turn was coming. The captain reported to Nelson that in breaking through the French ships they would be sure to foul one of them; only to be told that it did not signify which one he ran aboard: he could take his choice. A little before one o'clock the "Victory" passed close under the stern of the "Bucentaure," the French flagship, and poured in a murderous broadside from double- and treble-shotted guns, exactly in the same way as the "Royal Sovereign" had opened the proceedings with the "Santa Ana." This one terrible onslaught killed, or wounded, nearly 400 of the "Bucentaure's" men, and dismounted a score of her guns.

When the "Victory's" bows cleared her opponent's stern, she was laid open to the fire of the "Neptune" and "Redoutable," which caused no damage except to her rigging. In all probability Hardy intended to range up on the "Bucentaure's" beam, but collided with the "Redoutable" instead. With their yard-arms locked, there commenced a terrible struggle for the mastery. From the "Victory's" lower and middle decks poured a steady fire that the gunners of the "Redoutable" refused to face. But if the "Victory" got the better of it below, up aloft the French held the advantage. Nelson was opposed to the use of explosives in the tops owing to the danger of firing the sails, and consequently the "Victory's" tops were unarmed, whereas those of the "Redoutable" were packed with sharp-shooters, who played havoc with their fire on the British upper deck and forecastle, where also hand grenades dropped from aloft.

Seeing that their musketry was taking such good effect, the French crowded into the gangway with a view to boarding the "Victory"; but this move was nipped in the bud by Wilmot, the boatswain. When engaging with the "Bucentaure," he had

emptied a forecastle 68-pounder carronade, with a charge of roundshot and 500 musket bullets, into the enemy's cabin windows with immense effect; and he now sent a similar discharge among the preparing boarding party, which caused the postponement, if not the abandonment, of the project.



NELSON FELL UPON HIS FACE

The firing from the "Redoutable's" top still continued, and at a quarter after one a bullet from her mizen-top struck the epaulette on the left shoulder of Nelson, who fell on his face on the spot where his secretary had been killed. The bullet passed downwards through the lungs and spine, and lodged in the muscles of the back. As the admiral fell, Hardy ran up to express a heartfelt hope that the wound was not serious. "They've done for me at last, Hardy," was the reply. "I hope not," answered the captain. But Nelson knew it was a mortal injury. "Yes," he said, "my backbone is shot through."

Nelson was carried down into the cockpit by a sergeant of marines and a couple of seamen, and there he remained in the gloom, that was only relieved by the flickering lights of the battle lanterns,

until the end came three hours later.

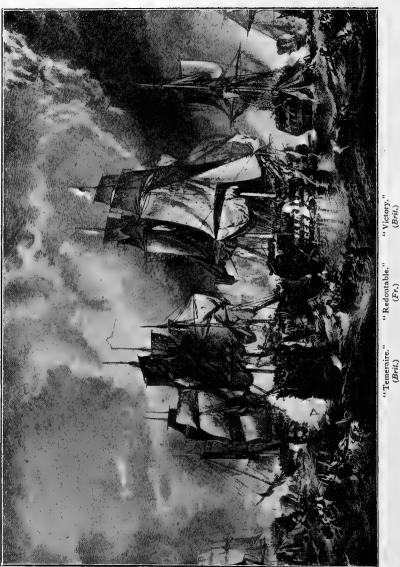
There have been occasions recorded in earlier pages where the death of a great commander has thrown his fleet into utter confusion, but there was no repetition of history on this occasion, but rather the reverse. The fall of Nelson inspired the French sharp-shooters to greater efforts, and within but a few minutes they killed or wounded forty officers and men, almost clearing the "Victory's" upper deck. The death-warrant of every soul in the tops of the "Redoutable" was signed, for our marines and seamen shot every one of them, Midshipman Pollard claiming the credit of having killed the man who robbed us of the world's greatest admiral.

The French, perceiving that the quarter-deck of the "Victory" had been depleted of its men, now made another attempt to board her; but the gunners streamed up from below and repulsed them vigorously. The French captain still hoped to succeed, and swarmed his men on the quarter-deck and forecastle, waiting for another opportunity of boarding by way of the mainyard, which he had lowered as a bridge. At that time the "Téméraire" came up on the starboard quarter of the "Redoutable," and, with a raking broadside, killed more than 200 of the prospective boarders. This deadly blow the British 98 followed up by running the enemy on board, when she struck her flag, having lost in killed and wounded

520 men of her crew out of 640.

The "Téméraire" had only just secured the "Redoutable," and the "Victory" had not yet got disentangled from her, when the "Fougeaux" arrived on the starboard quarter of the "Téméraire." The French ship had already been mauled by the "Royal Sovereign" and other ships, and now the "Téméraire" gave her a drastic reception with a starboard double-shotted broadside, every shot of which found its mark. Amid the smoke and confusion the British ship fell on board this second opponent, to whose forerigging she lashed her spare anchor. This was no sooner done than First-Lieutenant Kennedy headed a boarding party, who overcame all opposition and caused her to strike just before two o'clock. The tribulation of the "Fougeaux" was marked by heavy losses, amounting to at least 400 killed and wounded.

By this time the crippled "Victory" was clear and standing to the north, but the "Téméraire" was entangled between her two prizes; not that it was of much consequence, for the battle was



BATTLE OF TRAFALGAR "Redoutable."
(Fr.) "Temeraire." (Brit.)

practically at an end so far as these two vessels were concerned,

except for occasional long range firing.

The British "Neptune," in getting into action, shot away the "Bucentaure's" main- and mizen-masts and then engaged with the "Santissima Trinadad," which she practically dismasted before she was called upon to take the fire of Dumanoir's division of five ships, as it passed to windward. Closely following the "Neptune" came the "Leviathan" and "Conqueror" to attack the "Bucentaure," the one assailing her on the lee quarter and the other raking her with great effect. Presently the French flagship surrendered and the "Conqueror" took posssesion of her, Admiral Villeneuve and his captain being sent aboard the "Mars." This left the "Conqueror" at liberty to bear away to the "Santissima Trinadad," which was now a mere hulk and shortly fell to the "Prince." When the "Bucentaure" struck, Captain Israel Pellew, brother of Sir Edward Pellew, did not know that she was the French flagship. Not being able to spare his first lieutenant, Captain Pellew sent Captain Atcherley of the Marines to take possession. To his surprise he found the prisoners included Admiral Villeneuve, Captain Majendie, Captain Prigny, chief of the admiral's staff, and General de Contamine in command of 4000 troops that were aboard the French fleet.

Our small "Africa" pluckily engaged the bigger "Intrépide" until the "Orion" came up to assist her. The latter shot away the Frenchman's main- and mizen-masts, but not until the "Conqueror" and "Ajax" joined in the attack did the gallant Infernet strike his

colours

After the "Leviathan" had left the "Bucentaure," she hauled up to engage the French van, and succeeded in bringing the "San Augustin" to action. The Spaniard endeavoured to pass ahead, but received a treble-shotted broadside at only fifty yards' range, that caused her to fall on board her adversary, whose first lieutenant, with a strong boarding party, carried her with comparative ease. One of the "Leviathan's" seamen, who had an arm shot off, refused to be carried below, because it would take men from the guns. He calmly walked down to the cockpit, and sang "Rule Britannia" in a fairly steady voice, while the surgeons were amputating his arm at the shoulder. The brave stoic, however, died in hospital at Gibraltar.

Rear-Admiral Dumanoir, with the "Formidable," "Duguay Trouin," "Mont Blanc," "Scipion," and "Neptuno," feared to plunge boldly into the fight, but did not hesitate to fire on British ships and their prizes, and in this manner the "Fougeaux," in particular, received additional severe damages. About three o'clock Dumanoir became engaged with the "Ajax," "Britannia," "Agamemnon," and "Orion," but with no marked effect. The "Minotaur" and "Spartiate" did better, for they heaved to and,

after exchanging broadsides with the first four of Dumanoir's quintette, cut off the Spanish "Neptuno," which had fallen to leeward. This ship they engaged and overpowered about five o'clock, after a brilliant defence.

It is now time to return to the cockpit of the "Victory," where the stricken Nelson lay upon a midshipman's pallet awaiting the end. When at intervals the men of the "Victory" loudly hurrahed as an



NELSON IN THE COCKPIT OF THE "VICTORY (From the Picture by A. W. Devis)

enemy struck, the face of the dying admiral would light up with intense joy. Every now and then he would cry out: "Will no one bring Hardy to me? He is surely dead!" But the battle raged so fiercely that for more than an hour Hardy could not leave the deck to come below, notwithstanding repeated messages from his anxious chief. Seventy minutes after the fatal shot the gallant captain paid a hurried visit to the crowded cockpit, and as they shook hands Nelson inquired eagerly:

"Well, Hardy, how goes the battle? How goes the day with

us?"

"Very well, my lord," was the answer; "we have got a dozon or fourteen of the enemy in our possession."

"I hope," said his lordship, "none of our ships have struck,

Hardy.''

"No fear of that, my lord," replied the devoted captain.

With his mind relieved on primary battle matters, the admiral then spoke of himself.

"I'm a dead man, Hardy. It will be all over with me soon."

And Hardy, overcome with grief, wrung his friend's hand and returned to the deck.

Fifty minutes later Hardy was again in the cockpit, reporting that he believed fourteen or fifteen of the enemy's sail had surrendered, and congratulated the admiral upon his brilliant victory.

"That is well," replied Nelson, "but I bargained for twenty."

Before the first shot of the battle was fired Nelson had signalled the fleet to anchor at the close of the day, for the barometer indicated bad weather, in which it might go badly with dismasted or otherwise crippled ships. He now constantly urged upon Hardy for that order to be carried out.

The end of the great admiral was at hand. "I thank God I have done my duty," broke from his parched lips more than once, and they were the last words he uttered, for the tortured spirit

fled from its shattered tenement at 4.30.

The battle ended about five o'clock, the "Intrepide" apparently being the last of the enemy to surrender. Eighteen of the allied ships were in our hands when Admiral Gravina, himself mortally wounded, made sail northward with the remnant of the combined

fleet, although not all of them escaped.

When Captain Hardy, accompanied by Blackwood, went on board the "Royal Sovereign" to report the death of Nelson and his last wishes, Collingwood, upon whom the command naturally devolved, did not agree with anchoring the fleet immediately. Not until nine o'clock was the signal made to prepare to anchor, by which time most of the fleet were wearing out to sea, lest they should drift towards the shoals of Trafalgar. In some cases our vessels had their anchors shot away. It was blowing hard at midnight and some of the crippled victors had difficulty in keeping affoat. Most of the shattered prizes were in a terrible plight; the "Redoutable "foundered, and the "Bucentaure" and "Fougeaux" were wrecked. The prisoners had to be released from below to prevent them from being drowned like rats in a trap, and the crew of the "Algésiras" snatched at the opportunity of recapturing their ship. The "Santa Ana" and "Neptuno" drifted towards Cadiz and were recaptured by Commodore Kerjulien, who put out to sea again with five sail-of-the-line and five frigates. Collingwood endeavoured to bring the commodore to action but he declined to fight. The recapture of the two British prizes cost the French

admiral dearly, for all his shattered ships could not regain Cadiz in face of the gale; the "Indomptable" (with the crew of the "Bucentaure" aboard, in addition to her own) was wrecked with the loss of 900 lives; the "Rayo" suffered the same fate, also with great loss of life; and the "San Francisco de Asis" drove ashore,

but her crew happily escaped.

The tale of disaster concerning Collingwood's prizes was by no means at an end. The "Monarca," "Aigle," and "Berwick" were wrecked; and it was found necessary to scuttle or burn the "Santissima Trinadad," "Intrépide," "Argonaute," and "San Augustin." Only the four ships, "Bahama," "San Ildefonso," "San Juan Nepomuceno," and "Swiftsure" reached England; and they were too dilapidated to enter our service. On 4th November, however, Sir Richard Strachan with a squadron of five ships encountered Dumanoir off Cape Ortegal, and after a desperate resistance captured the "Formidable," "Duguay Trouin," "Mont Blanc," and "Scipion." These ships had suffered but little damage in the battle, and were added to the British Navy. The "Duguay Trouin" was renamed the "Implacable," and was used at Devonport as a training ship for boys.

The British casualties were 449 men killed and 1242 wounded. Among our killed were Lord Nelson, 2 captains, 8 lieutenants, 4 marine officers, and nearly 20 midshipmen; the injured included 4 captains, and about 20 lieutenants, 12 marine officers and 50

midshipmen.

News of the great victory reached London early on the morning of 6th November. Nelson's final triumph would have elicited pæans of joy from the exultant nation, but the splendour of the smashing of our enemies was overshadowed by the grief of the people at the loss of the famous admiral, whom they had come to look upon as

their stand-by in the time of peril.

The "Victory," after having been refitted at Gibraltar, with Nelson's body on board, arrived at Spithead on 5th December. For three days the body lay in state at the Painted Hall, Greenwich, and on 6th January 1806 it was borne to St Paul's and entombed in the presence of the heir to the throne, all the King's sons, the ministers of the State, and the nobles of the land. No funeral on a scale of such magnificence had been witnessed ever before. Among the troops present were 10,000 soldiers who, under Abercromby in Egypt, had put the seal upon the battle of the Nile and had freed the land of the Pharaohs from the curse of Bonaparte. But to the massed thousands of mourning spectators the most interesting men in the funeral procession were the gallant fellows of the "Victory." These untutored seamen, many of them scarred and maimed, who had fought undismayed while shot and shell ravaged their decks, now gave way to unrestrained grief; and as the coffin disappeared from sight they tore to pieces the "Victory's" flag, so that each one might possess a memento of their beloved hero. And there in the crypt they left Nelson treasured up in the heart-core of London, in a sarcophagus which Cardinal Wolsey had built for Henry VIII. In the cathedral above was placed a monument by Flaxman; in Trafalgar Square was erected a great pillar of victory. But Nelson's real monument lies in British hearts, in which his memory lives enshrined for all time to vivify our ideals of duty and self sacrifice.

As the great hero had passed beyond all earthly rewards, a grateful country bestowed them upon his relatives. Lord Nelson's heir, his brother William, was gazetted Earl Nelson of Trafalgar,



THE VICTORY" BEING TOWED INTO GIBRALTAR THE DAY AFTER THE

with a pension of £6000 a year, and an estate valued at nearly £100,000; his sisters received £15,000 each; and to Lady Nelson was awarded £2000 a year for life. Admiral Collingwood was raised to the peerage with a pension of £2000 a year; the Earl of Northesk received the Knighthood of the Bath, and Captain Hardy was made a baronet. The first lieutenants of the "Victory," "Bellerophon," and "Mars," and the acting captains of the "Ajax" and "Thunderer," were promoted to post-captain; the first-lieutenants at least of each other ship were made commanders; and on each ship at least one midshipman was promoted to lieutenant.

One monument to Nelson must not be forgotten. The "Victory," the most famous of our old wooden walls, is still afloat in Portsmouth Harbour, and it is unlikely that we shall ever part with the relic as long as a couple of her planks will hold together. The



THE NELSON COLUMN, TRAFALGAR SQUARE, 21ST OCTOBER 1905 (Decorated in honour of the Centenary of the great victory)

ravages of time have necessitated alterations that would cause any of her old crew to fail to recognise her beyond her general shape; but she still remains the most fascinating ship afloat. We can see the spot where the great admiral fell, and the cockpit where he breathed his last. "The 'Victory' is not dead; she sleeps and dreams, wakefully, telling us of the wondrous things she has known and seen and done; keeping us in touch with the brave old days of sail and oak."

CHAPTER XX

TRAFALGAR'S AFTERMATH

THE battle of Trafalgar worked a revolution in the affairs of Great Britain; it banished the bogey of an invasion by the French; it freed us not only from great mental anxiety, but reduced the enormous expenditure which the great struggle had entailed; it permitted us to pay attention to the expansion of our colonial empire; and finally it freshly encouraged various Continental countries to resist Bonaparte's aggressions on land, although for sometime he continued to win splendid victories.

The coalition between France and Spain had been struck an irrecoverable blow, and no large fleets were now afloat to challenge our naval supremacy. But always there were small detachments of ships to harass our commerce and to operate against some of our island possessions in different parts of the world, that were open to sudden and swift attack. Many pages could be occupied with accounts of dozens of brilliant minor engagements, but the greater

operations demand the space.

The Brest fleet still remained practically intact, but our strict blockade held it in check until 13th December, when Vice-Admiral Leisseigues escaped with five ships and Rear-Admiral Villaumez with half a dozen. When the news reached Lord Collingwood, who was still with the British fleet off Cadiz, he detached Sir John Duckworth to go in search of the French squadrons. Villaumez, with an 80-gun ship and five 74's, had gone to the Cape of Good Hope

while Leisseigues had sailed for the West Indies.

Sir John Duckworth proceeded to Barbadoes, where he was joined by Rear-Admiral Cochrane. After sailing to St Kitts and refitting there, the British squadron went to St Domingo, and there found Leisseigues with his ships at anchor. The French squadron consisted of the "Imperial," 120 guns; "Alexandre," 80; "Brave," "Diomède," and "Jupiter," 74's; the frigates "Cornete" and "Félicité," and the corvette "Diligente." The British squadron comprised the following:—

Ship.			(Guns.	Officer in Command.			
"Superb"	•	•		74	Vice-Admiral Sir John Duck- worth			
" Northumberland " .				74	Captain Richard Keats Rear-Admiral Hon. Alexander Cochrane			
"Canopus"				8o	Captain John Morrison Rear-Admiral Thomas Louis Captain Francis Austin			
"Spencer"				74	" Hon. Robert Stopford			
" Donegal				74	" P. Malcolm			
" Atlas "				74	". Samuel Pym			
" Agamemnon	1)			64	" Sir Edward Berry			

Frigates: "Acasta" (Captain Dunn), "Magicienne" (Captain Mackenzie); sloops, "Kingfisher" and "Epervier."

Upon the appearance of the British squadron, the French admiral slipped his cables and put to sea to escape, but, finding it impossible to shake off his enemy, was compelled to fight, while running before the wind at about seven knots an hour. The "Superb" and "Northumberland" engaged the "Alexandre" and "Imperial" respectively at about ten o'clock, and shortly the "Spencer" assailed the "Diomède." The "Imperial" was the largest ship in the world, mounting 120 heavy guns, and manned by 1200 men. When the "Alexandre" had received three broadsides, she hauled away on the port tack, leaving the "Superb" to assist her gallant sister 74 in attacking the huge French flagship. Presently the "Alexandre" sought to rejoin her consorts, but the "Spencer" raked her severely and brought her to close action. While they were hotly engaged, the "Canopus" crossed the bows of the couple, firing a broadside into the "Alexandre" that shot away her already tottering masts; and a little later the "Donegal" and "Atlas" also fired into her, by which time the French 80 was a wreck and surrendered. Without waiting to take possession, the "Donegal" wore off to assist some of her consorts. The "Donegal" forced the "Brave" to strike, while the "Atlas" was engaging the "Jupiter"; but as Duckworth signalled the "Atlas" to follow the "Canopus" to attack the "Imperial" and the "Diomède," the "Donegal" transferred her attentions to the "Jupiter," and completed the damage which the "Atlas" had commenced; and the third enemy struck her colours.

The French three-decker fought gallantly. She coped well with the two 74's, but with the "Canopus" on the scene the Frenchman's chances sank to zero. When the "Imperial" had lost her main and mizen-masts, Admiral Leisseigues hauled towards land, where the ship struck and parted with her foremast. Finally she surrendered, but not until she had lost nearly half her crew, killed and wounded. As the "Diomède" ran ashore and was wrecked the British admiral had the satisfaction of accounting for the whole squadron of five battle-ships; only the frigates escaped by clearing off before a shot was fired. Our losses totalled 74 killed and 265 wounded. The "Imperial" and "Diomède," being complete wrecks, were set on fire; the remaining prizes were taken to Tamaica.

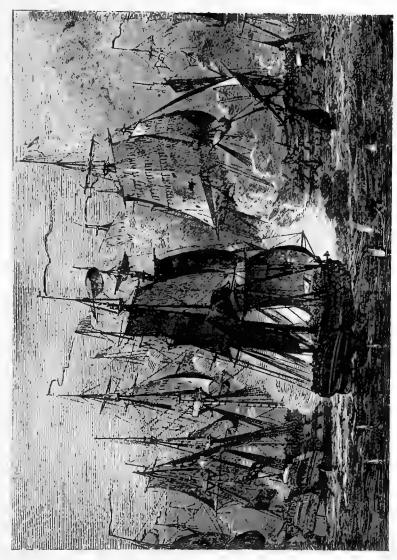
Having no longer to concert measures against great hostile fleets, we were able to send out various expeditions against the enemy's distant possessions, some of which had been snatched from us while we had been bending our energies to the protection of the homeland. In February 1806 Commodore Sir Home Popham arrived with a squadron, and troops under Sir David Baird, at the Cape of Good Hope. Three days later the soldiers were landed in Saldanha Bay. The business of the expedition was quickly achieved when Cape Town was menaced by artillery; Jansens, the Dutch general, capitulated, and an important addition was made to our empire.

Admiral Villaumez's squadron did not meet with such signal disaster as his colleague's, but it would have paid him better to remain at home. One of his frigates put in at the Cape of Good Hope, not knowing of its reduction by the British; and Popham's squadron did not permit the 46-gun "Le Volontaire" to rejoin her consorts. Villaumez then tried his luck in the West Indies. In a gale the "L'Impétuex" went ashore and was captured by the "Melampus"; and three other ships were so closely blockaded by the British that their crews destroyed two of their own vessels. Finally, Villaumez probably accounted himself fortunate in getting only three ships of the whole squadron safely home.

After Commodore Dance had astonished Admiral Linois in February 1804 the Frenchman had remained in East Indian waters. where he had committed many depredations on our merchantmen. The Frenchman's annoyance ceased on 13th March 1806 when in the "Marengo," 80, accompanied by the frigate "Belle Poule," 40, he fell in with Sir John Warren's squadron, off the Azores. Linois' ship and a 40-gun frigate were captured, much to the relief of the East India Company, upon whose ships the French admiral had

preved for a couple of years.

When we last heard of Lord Cochrane he was captive to Linois off Gibraltar in July 1801. The gallant seaman, having been incarcerated in a French prison, was now celebrating his liberty by another series of daring exploits on the small frigate "Pallas," 38. The constant stream of prizes which he sent into Plymouth, showed the havoc he was making among the French and Spanish mercantile marines. In April his lordship's boats boarded and captured a 14-gun corvette with 95 men. While the boats were absent from the "Pallas," she was attacked by a couple of 20-gun



SIR JOHN DUCKWORTH ACCOUNTED FOR THE WHOLE SQUADRON OF FIVE FRENCH BAITLESHIPS

corvette and a 16-gun brig. Although short of a considerable portion of his crew, Lord Cochrane drove his three opponents ashore. During the next five weeks he captured a few more vessels and occupied a little spare time in destroying several batteries. Accompanied by the corvette "Kingfisher," Cochrane next visited Aix Roads and approached within two miles of the battery on the island. The French sent out "La Minerve," 40, and three brigs. The Englishman braved the quartette, and when he had crippled a brig. he cleverly got to windward of the 40-gun ship, and while he engaged her, he also opened fire on the shore battery. upon making the frigate his prize, he ran the "Pallas" into her with such force that he fetched down his own fore-topmast and foreand main-top-sail-yards, so that his ship was little more than a wreck. Even this did not damp Cochrane's ardour, but when two more frigates were putting out of harbour, the "Kingfisher" took the "Pallas" in tow and got her safely away to repair damages.

Nelson's friend Sir Thomas Troubridge, now a rear-admiral, was sent to take the command in the East Indies in 1806. He sailed in the "Blenheim," 74, some East Indiamen being under his protection. Before he gained the station he had to beat off Linois with the "Marengo" and "Belle Poule." Owing to an unfortunate blunder, Sir Edward Pellew, whom Troubridge was to replace, had received no orders of recall from the Admiralty, and it was quite understandable that the two gallant officers failed to agree. After an interval Troubridge was appointed to the station at the Cape of Good Hope, for which he set sail from the East in January 1807. He was accompanied by the "Java," a Dutch-built frigate, and the sloop "Harrier," in command of his son. Only the last named arrived at the Cape, it being supposed that the "Blenheim" and

the frigate foundered during a gale.

The first day of the year 1807 witnessed the capture of the Danish settlement of Curacoa in the West Indies by a British squadron of four frigates:—"Arethusa," 38, Captain Charles Brisbane; "Latona," 38, Captain Wood; "Anson," 44, Captain Lydiard; and "Fisguard," 38, Captain Bolton. Curacoa harbour entrance is only 50 fathoms wide, and was commanded by Fort Amsterdam, mounting 60 guns, while inside were the 36-gun frigate "Halstaar" and 20-gun corvette "Surinam." Upon arrival shortly after daylight, the British demanded surrender within five minutes, which naturally, in the circumstances was ignored. The squadron opened fire and after a few broadsides boats were manned; and while Captain Brisbane boarded and captured the "Halstaar," Captain Lydiard secured the corvette. This preliminary success inspired the party, which made for shore, where the gallant captains led their little force against Fort Amsterdam, although it was manned by 270 soldiers. In the incredibly short space of ten minutes the

sailors had scaled the walls, and the British flag was floating over the fort, whose guns were then turned on Fort Republique and smaller fortifications which guarded the town. By midday Captain Brisbane was in possession of the whole island. The British casualties were only 17, while the Danes lost quite 200 in killed and wounded. For this brilliant achievement Captain Brisbane was knighted. The Danish islands of St Croix and St Thomas shortly fell into our hands.

France being at war with Russia, Bonaparte by various diplomatic moves persuaded the Sultan to declare against the Czar, and at the same time Turkish unfriendliness towards Great Britain was so manifest that it was decided to despatch a squadron to the Dardanelles in order to strengthen our minister's representations to the Porte, and if the occasion warranted we should demand the

surrender of the Turkish fleet.

Lord Collingwood, upon the receipt of instructions from home, despatched a powerful squadron under Sir John Duckworth, consisting of his flagship, the "Royal George," 100, one 98-gun ship, two 80's, three 74's, one 64, one 38, and a couple of bomb-boats in tow. Rear-Admirals Sir Thomas Louis and Sir Sydney Smith were on the "Canopus" and "Pompée," 80's, respectively. 19th February 1807 our ships entered the 30-mile long Dardanelles to come under the fire of the three pairs of forts that guard the passage. At the narrowest point the castles of Sestos and Abydos subjected the vessels to a heavy cannonade, which was returned, but Duckworth did not pause, except to destroy a small Turkish squadron at anchor off Point Pesquies. On the 20th the British squadron anchored within eight miles of Constantinople. twelve days fruitless negotiations were carried on by our ambassador, during which time the Turks energetically strengthened their defences to such an extent that Admiral Duckworth decided to pass out of the strait. Weighing anchor on 2nd March, a fair wind enabled the ships to make good progress. Fortunately they escaped any very serious damage as they passed the forts, although some of the stone shot from the Turkish guns weighed 800 lbs. One of these missiles, 6 feet in circumference, struck the "Windsor Castle," 98, and a similar one hit the frigate "Active" near the waterline. Our total losses in this expedition were 39 killed and 216 wounded, exclusive of the loss by fire of the "Ajax," 74, with 250 of her crew, which happened while waiting for a favourable wind to enter the strait. The expedition was really a failure, but the double passage of the Dardanelles in face of the formidable batteries without losing a ship was a remarkable performance.

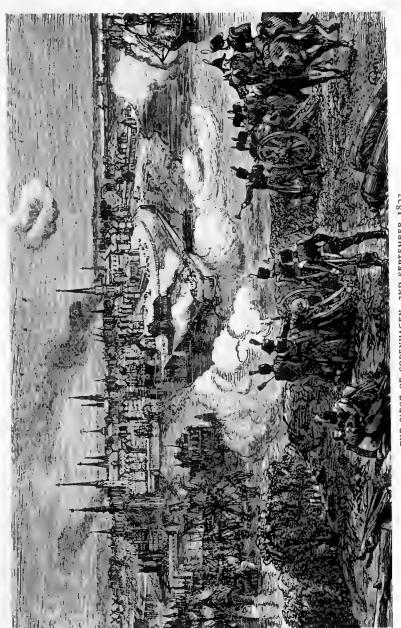
Although French operations against us at sea were now largely confined to attacks upon our commerce by privateers, Bonaparte endeavoured to force other nations to close their ports to our commerce. He desired to secure that, "England should see her

merchandise repelled by all Europe; and her ships, loaded with useless wealth, seek in vain from the Sound to the Hellespont a port open to receive them." Towards achieving this aim the emperor, by the Treaty of Tilsit, July 1807, made with Russia, could compel Denmark and Sweden to close their ports to us, and afford France the use of their fleets.

It was necessary to counteract this new move of the arch-enemy without delay; and at the end of the month Admiral Gambier sailed from Yarmouth with 17 sail-of-the-line, 21 frigates, and a number of smaller vessels, with an army of 20,000 men under General Lord Cathcart. The object of the expedition was to demand the surrender of the Danish fleet, to prevent it being employed against us; and on the termination of the war with France we promised to restore the ships to Denmark. When the Danes refused to comply with the British demand, the troops were landed and the siege of Copenhagen commenced on 2nd September. After three days' bombardment, the Danes capitulated, their fleet was surrendered, and at the end of October it was convoyed to England. The vessels comprised 18 sail-of-the-line, 15 frigates, and about 30 smaller vessels. This great collection of shipping, in the circumstances, were now prizes of war. Only four of the battleships were fit for our own naval service, but ninety transport loads of naval stores were well worth capture. For this success Admiral Gambier

was raised to the peerage.

The year 1808 found Russia at war with us as the ally of France, but our aid was now sought by Spain. The French had invaded Portugal and an army entered Lisbon in the previous November. The Portuguese royal family fled to Brazil, whither they were convoyed by a British squadron. Entering Maldonada Bay, entrance to River Plate, the "Agamemnon," Nelson's favourite ship, ran on a shoal and filled; and afterwards was dismantled and deserted. Charles IV of Spain abdicated in favour of his son Ferdinand who had plotted against the crown at the instigation of Bonaparte. Shortly afterwards Charles repented, and father and son appealed to the Emperor, whose solution of the difficulty was to place his brother, Joseph Bonaparte, on the Spanish throne. Great Britain being absolutely free from any fear of invasion by Bonaparte, decided to send an army to the relief of Portugal and Spain, and thus commenced the Peninsular War, that lasted until 1812. Our army was commanded by Sir Arthur Wellesley, who had earned fame in India and at the siege of Copenhagen. Our troops gained important victories over the French, upon which the Navy had an important bearing that is not always realised. Wellesley recognised it, as shown in one of his letters: "We have possession of all the navigable rivers, of which we make use to convey our supplies as far as they will go, and the naval power of Great Britain protects the arrival of these supplies and the formation of our magazines on the



THE SIEGE OF COPENHAGEN, 2ND SEPTEMBER 1807

coast." In case of disaster to our army, too, there was always the

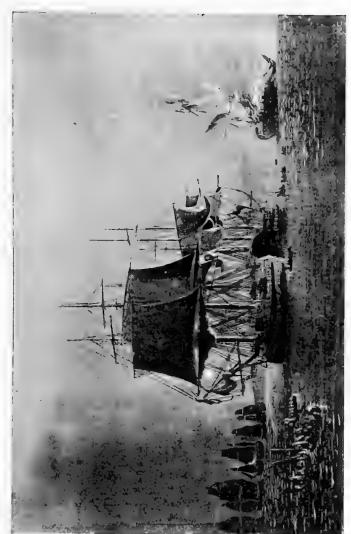
coast to which to retire for the protection of the fleet.

When war broke out with Russia, Sir James Saumarez sailed for the Baltic with II ships-of-the-line, but there was no general engagement with the Russians. Sir Samuel Hood was second-in-command, and with the "Centaur" and "Implacable," 74, he attached himself to the Swedish squadron, and these were the only ships that met the Russians in combat. The "Implacable" engaged the "Sevolod," 74, and forced her to strike, but could not take possession because of other Russian ships bearing down to her aid. Later, in the harbour of Rogerswick, the "Centaur" ran on board the "Sevolod" and, lashing her, compelled her to strike a second time. More of her consorts again came to her assistance, but she was aground and her hold half full of water. It was impossible to move her and, when the wounded and prisoners had been removed, she was set on fire. The "Implacable" and "Centaur's" joint losses were 9 killed and 53 wounded. The "Sevolod" lost 123 men killed and wounded in the first action, and after being reinforced by a hundred men, she lost 180 against her second adversary. Sir James Saumarez blockaded the Russian fleet in Rogerswick until winter was approaching, when he returned to England, leaving Rear-Admiral Richard Keats to continue the vigil.

Our unsatisfactory expedition to the Dardanelles was avenged by the 38-gun frigate "Seahorse," Captain John Stuart, on 5th July 1808. In the Levant she fell in with the Turkish ships, "Badere Saffer," 52 guns and 540 men, and the "Fezan," 24 guns and 230 men. Her two opponents made desperate efforts to board the "Seahorse," but Stuart, by brilliant seamanship, eluded all their attempts. Some remarkably accurate gunnery caused the "Fezan" to leave the neighbourhood badly crippled and, after a fierce conflict, the "Badere Saffer" hauled down her colours. Her hull was literally riddled, and her decks were strewn with no less than 170 men killed and 200 wounded, or two-thirds of the entire crew disabled.

The "Seahorse" only lost 4 killed and 10 wounded.

A bloodthirsty contest took place between our 36-gun frigate "Amethyst," Captain Michael Seymour and the French 40-gun frigate "Thetis." While the Frenchman sought unsuccessfully to rake the "Amethyst," the British guns swept her opponent's decks continually. When the French captain was preparing to board, the "Amethyst" cleared the enemy's forecastle with a well-directed broadside. Until long after midnight the two ships fought with their guns muzzle to muzzle, and at length those of the "Thetis" were silenced, and Seymour boarded her and took possession. The "Amethyst" had lost her mizen-mast and she had been on fire several times; she lost 20 killed and 50 wounded. The "Thetis" was shattered; her captain and 133 men were killed, and 102 wounded.



THE BURNING OF THE "SEVOLOD"

During the year 1809 the British Navy scored numerous successes in different parts of the world; individually a number of them were of small importance, but the aggregate proved still further to the enemy that our supremacy at sea was beyond all dispute. In February Rear-Admiral Sir Alexander Cochrane, with 6 sail-of-the-line, 6 frigates and several smaller vessels, having on board 10,000 soldiers commanded by General Beckwith, attacked Martinique, which was garrisoned by 5000 troops. The squadron bombarded Fort Desaix at a cost of 25 men killed and wounded. The French were commanded by Villaret Joyeuse, who was Lord Howe's opponent on "The Glorious First of June." The gallant officer offered a strenuous resistance, but could not cope with the joint naval and military force arrayed against him, and the island fell into our hands once again.

Admiral Villaumez in Brest was blockaded by Lord Gambier during the winter of 1808-9, but when the British squadron was scattered by a gale in February the Frenchman got out to sea with 8 sail-of-the-line and a couple of frigates. Off Lorient three more frigates tried to join him, but were prevented by Rear-Admiral Stopford's four ships; the frigates were driven ashore and destroyed. Villaumez got no further than Basque Roads, where he was blockaded by Lord Gambier, Admiral Stopford and Commodore Beresford,

whose united squadron totalled II sail-of-the-line.

Now that Villaumez had left the security of Brest the British Admiralty did not propose to allow the French ships to escape from Basque Roads, or they assuredly would proceed to the relief of Martinique. Lord Cochrane, happening to be in England, the First Lord of the Admiralty requested the dashing hero of the "Speedy" and the "Pallas" to undertake the task of destroying the French fleet by means of fire-ships. Cochrane joined the blockading squadron; but as there was delay in the arrival of the fireships, he commenced to prepare a number of transports for his purpose. Three explosion vessels, in particular, were calculated to work enormous destruction, if they could get among the enemy. Each of these vessels contained 1500 barrels of gunpowder, 300 live shells, and thousands of hand grenades. Meanwhile Villaumez was succeeded by Admiral Allemande, who arranged his ships in a double line, near to the island of Aix, with his three frigates nearly half a mile in advance. A hundred yards or so in front of these was constructed a heavy boom, extending right across the narrow entrance to the anchorage. The French ships-of-the-line were one 120-gun ship, two 80's, seven 74's and a 50; and their broadsides were directed upon the boom, while the shore batteries mounted 30 heavy guns, and mortars in addition. It will be readily understood that the service undertaken by Cochrane was of the most desperate character.

On 11th April the frigates "Impérieuse," "Aigle," "Unicorn" and "Pallas" anchored about two and a half miles from the French

fleet, in readiness to pick up the crews of the fire-ships, when they had sent in their dread craft to wreak their worst. Cochrane, in the largest explosion vessel, led the attack in person about 8.30, the night being very dark. A lieutenant and four seamen remained until the last moment with his lordship, who kindled the port fires with his own hands before taking to their boats. They had pulled away desperately for seven or eight minutes when the explosion occurred. The effect was terrific; the whole harbour rocked; and the sea was so convulsed as almost to swamp the boats of the fire-ships' crews as they made for their frigates. The boom was shattered, and upon the French ships showered shells, grenades, and portions of blazing wreckage. Although some of the fire-ships miscarried, four of them reached the enemy, who in great consternation cut their cables with the exception of one 80 and one 74. At midnight Cochrane knew that quite a dozen French ships were aground; and at 6 a.m. he signalled the admiral from the "Impérieuse" that half the fleet could destroy the enemy, or that even the frigates could smash them.

Lord Gambier, however, did not bring his ships nearer than six miles from the enemy, most of whom threw their guns overboard, and were getting afloat again with the rising tide. This hesitancy was too much for the patience of Cochrane, who, without waiting for orders, dropped down in the "Imperieuse" with the tide toward the enemy. Shortly Cochrane signalled that his ship was in distress, merely to cause Lord Gambier to bestir himself, and the "Valiant" and "Revenge," 74's, and five frigates were sent to his aid. By the time they arrived, Cochrane had been engaging a couple of 74's and the "Calcutta" 50, and had just taken possession of the last-named. At the end of the afternoon a couple more ships struck, and the "Tonnerre," 74, had been set on fire by her crew, before they escaped in their boats. Five of the Frenchmen, including the "Ocean," 120, were still aground, and the captain of the "Valiant," signalled to the admiral that the whole of them were ripe for destruction. Lord Gambier's reply was to recall the advanced ships. The signal was not obeyed that night. It was complied with on the following morning when the admiral repeated it, but Captain Bligh first set fire to the "Aquilon" and "Ville de Varsovie." Lord Cochrane and Captain Seymour of the "Pallas" were preparing to make a warm attack upon the remaining ships of the enemy, when an urgent letter arrived from the admiral ordering their immediate return, and the utterly disgusted Cochrane had no option but to obey.

There is no doubt that if Lord Cochrane had enjoyed a free hand he would have wiped this French fleet out of existence. The result was most unpleasant for his lordship. When a vote of thanks to Lord Gambier was proposed in Parliament, it was opposed by Lord Cochrane, who was a member of the assembly. Lord Gambier



LORD COCHRANE IN BASQUE ROADS

thereupon demanded a court-martial, which acquitted him honourably on all the points in dispute. It was claimed that variable winds, treacherous currents and uncharted shoals were the cause of the admiral's caution, but it is fairly certain that the failure to follow up the brilliant beginning made by Cochrane was due to the offence given to the admiral and some of his colleagues, by the special appointment of a junior officer to undertake a duty that some of the seniors had already proposed, and were willing to carry out. Lord Cochrane resigned his command of the "Impérieuse"

and never saw active service again. Napoleon Bonaparte could not rest content without a navy, and already had entered upon a ship-building programme. Many French ships were being built at Antwerp, for Louis Napoleon had been King of Holland since June 1806. When the West Scheldt was crowded inconveniently with a squadron of new ships, the emperor obtained from his brother permission to make use of the port of Flushing, on the Isle of Walcheren. The British Ministry sent an expedition to attack Antwerp and Flushing. A powerful fleet of 37 sail-of-the-line, with numerous frigates and smaller vessels, sailed from the Downs at the end of July 1809 under Rear-Admiral Sir Richard Strachan; and with him were several hundreds of transports conveying 40,000 troops, commanded by Lord Chatham. The naval operations were eminently successful, and a two days' bombardment of Flushing secured its fall, with the capture of 6000 men and a vast quantity of stores. The enemy retreated to Antwerp, which Lord Chatham considered too strongly fortified to attack, and about two-thirds of the army returned to England. A small squadron and some 12,000 soldiers remained in possession of Walcheren, until fever and ague carried off quite half of our men; and the remnant of the force evacuated the island in December, after destroying the docks and fortifications of Flushing.

In October Rear-Admiral Baudin, with the "Lion" and "Robuste," endeavoured to convoy some storeships from Toulon to Barcelona. After the battle of Trafalgar, Lord Collingwood remained in command of our Mediterranean squadron, and in fact had been at sea ever since the outbreak of war in 1803. His Lordship despatched Admiral Martin with six sail-of-the-line to attack Baudin, which he did so effectively that the French ships ran ashore, where their crews set fire to them. Meanwhile Admiral Ganteaume, with four small warships and a fleet of transports, was sheltering at Rosas. Against these Collingwood sent Captain Hallowell. The French ships were under the protection of shore batteries, but on 1st November, Lieutenant Tailour, of the "Tigre," led a dashing attack on the enemy in the boats of the British squadron. Ganteaume's armed ships were boarded and their crews overpowered, notwithstanding a heavy fire from the batteries, and troops who lined the beach. By daylight our seamen had brought off, or burnt, eleven of the enemy's ships. The British losses were 15 killed and 55 wounded. Lieutenant Tailour was promoted to the rank of commander.

This attack on the enemy at Rosas was practically the last action organised by Lord Collingwood, for early in 1810, on account of ill-health, he relinquished his command to Rear-Admiral Martin in order to return to England; but the gallant admiral died on 9th March when one day out of Minorca. Lord Collingwood really



LORD COLLINGWOOD

sacrificed his life to duty, for the nature of his work in the Mediterranean had been of a most arduous character; but, like his old friend Nelson, he placed the interests of his country before any considerations of health or personal comfort.

Although our position in India was unassailable by France, her privateers and frigate squadrons captured or destroyed our merchantmen in Eastern waters without ceasing. These ships of prey found excellent headquarters at the islands of Bourbon and Mauritius, and, consequently, the capture of these islands was the first step in the suppression of the French depredations. In the year 1809 Commander Willoughby, of the 18-gun sloop "Otter,"

with 236 sailors and marines, and Colonel Keating with 350 soldiers, captured the town and harbour of St Pauls in Bourbon; while Commodore Rowley of the "Raisonnable," 64, stood into the bay with a small squadron and captured four ships. In this very successful little affair we lost 18 men killed and about 60 wounded.

In the summer of 1810 Commodore Rowley, in the "Boadicea," 38, arrived off Bourbon with another squadron. Only recently Captain Willoughby had nearly lost his life by the bursting of a musket, inflicting ghastly wounds, which were still bandaged; nevertheless, he superintended the disembarking of some troops, who carried St Denis, the capital, with only slight loss. The whole island, with a vast quantity of stores and considerable shipping,

passed under the British flag.

Mauritius, or Isle of France as it was then called, was attacked in August. The first operation was the capture of the batteries on the rocky Isle de la Passe, which were left in charge of Willoughby. On the 20th he descried five large French sail in the offing. He rowed off to his ship, the "Nereid," 36, and, by means of French signals induced the captains of the new arrivals to put into the harbour of Grand Port. The "Victor" sloop was the foremost ship, and at terribly short range the "Nereid" opened fire on her with 12-pounders with such effect that the sloop struck. The frigates "Bellone" and "Minerve" then came up and rescued their consort, and then got into the harbour with the "Ceylon" and

"Windham," two armed Indiamen.

The next morning eleven British seamen, armed only with boats' stretchers, boarded the "Windham" and captured her, although she mounted 26 guns and was manned by 30 men. A day later Captain Pym arrived with the "Sirius," 36, followed by the "Iphigenia," Captain Lambert, and the "Magicienne," Captain Curtis. Unfortunately the first and last-named frigates grounded as they entered the harbour to attack the enemy, but the "Iphigenia "engaged the "Minerve," 40, and forced her to run aground. The "Nereid" fired into the "Bellone" and "Victor." The "Ceylon" struck, and the "Bellone" ran aground, but did not cease to ply the "Nereid" with her heavier 18-pounders. Quite early in the engagement Captain Willoughby had his left eye torn out by a splinter, and his first and second lieutenants were wounded, one mortally. The greater part of the officers and men were either killed or injured. The ship was riddled with shot, and many of her guns were dismounted. After suffering terrible slaughter, Willoughby sent to Captain Pym for assistance or instructions, and was ordered to abandon the ship, which he refused to do. Meanwhile the "Bellone" reduced the "Nereid" to a helpless wreck and would not cease firing, even when Willoughby hoisted French colours as a token of surrender. Before the engagement commenced a small Union Jack was displayed upon the head

of the mizen-mast, and as the halyards and rigging had been shot away, it was impossible to haul down the flag. Of the "Nereid's" crew only 50 were left uninjured, 92 officers and men being killed and 138 wounded. The "Iphigenia" lost 18 men and the Magicienne," 28. The last-named and the "Sirius" being unmovable, were burnt. Captain Lambert might have got away with the "Iphigenia," but for the arrival of three more French frigates, when nothing remained but to surrender his ship and the island, on condition that all the survivors of the British frigates should be sent to the Cape of Good Hope.

The failure of this attempt to capture the island with an insufficient force was remedied in November by a squadron, under Vice-Admiral Bertie, and 10,000 troops commanded by Major-General Abercromby. The troops were landed about twelve miles from Port Louis, and after only a few skirmishes the French garrison surrendered, and Mauritius has remained a dependency of the

British crown.

In the previous February, Amboyna, one of the East Indian possessions of the Dutch, surrendered to a frigate squadron despatched from Madras. Before the end of the summer Captain Christopher Cole, of the "Caroline," 36, accompanied by the "Remonstrance," 38, and the "Barracouta," 18, reduced Banda, the principal of the Spice Islands. Under cover of darkness 400 men were disembarked to attack the Dutch. More than half of the force missed their way, but the remainder scaled the strong castle of Belgica and secured it, preparatory to a similar assault on the castle and town of Nassau. With only 140 sailors and 40 soldiers, Captain Cole captured the two castles, although they mounted 138 guns, and then forced the surrender of the garrison of 700 regulars, backed by militia. This brilliant success was unique, in that it was accomplished without the gallant leader losing a single man. Captain Cole was knighted and received four swords of honour, the one he most highly prized being presented to him by the steadfast crew of the "Caroline."

The most valued possession of the Dutch was Java, against which an expedition was sent from India in the spring of 1811. The British force consisted of a squadron under Commodore William Broughton, carrying troops supplied by Lord Minto, Governor-General of India. On July 24th Lieutenant Lyons, of the "Minden," with only two boats' crews numbering 34 men, attacked Fort Marrack, mounting 50 guns and garrisoned by 300 men. Lyons had served under Captain Cole at Banda, and thus had learnt the capabilities of a handful of British seamen. He timed his attack for midnight, and his approach was greeted with a volley of musketry. Although he had hoped to take the enemy by surprise, the lieutenant was not dismayed. By means of ladders the seamen gained the embrasures of the fort and secured the lower battery;



THE CAPTURE OF BANDA ISLAND

and when they had successfully stormed the upper battery, they hoisted the British flag. By this time the garrison had collected, and Lyons, aware of the tight corner his little force was in, called out to the enemy that he was backed by 400 men, who would give no quarter; and the garrison retired. When the desperate raiders had disabled the guns, they decided to regain their boats. As the launch had been stove in by the surf, the men crowded into the cutter and got back safely to their ships. Lieutenant Lyons was not twenty-one years of age; this brilliant action at Fort Marrack gained for him early promotion; and forty years later he was naval commander-in-chief in the Black Sea during the Crimean War.

About ten days later the British troops were landed some twelve miles from Batavia. The Dutch General, Jansens, had entrenched himself strongly with an army of 9000 men. General Gillespie, in charge of the troops, stormed the position, after it had undergone a vigorous bombardment for a couple of days. A naval brigade of 500 men under Captain Sayer rendered yeoman service, and troops and seamen carried all before them. When an immense number of the enemy had been killed or wounded and taken prisoner, General Jansens retreated eastwards, but eventually he was forced.

to surrender the island and its dependencies.

If the few French ships-of-the-line rarely ventured out of port, Bonaparte made considerable use of frigates to obtain the sea communication that was so necessary to aid his various activities. In 1810 Captain Brenton, 38-gun frigate "Spartan," manned by 258 men, was attacked off Naples by a squadron sent out by Joachim Murat, whom the emperor had made King of Italy. The British captain had never been one to fear odds, but on the present occasion he found himself opposed to the "Ceres," 42, "Fama," 28, an 8-gun brig, a 10-gun cutter and several gunboats. All told, the enemy totalled 1400 men and 95 guns. Nevertheless the "Spartan" engaged each of the enemy in succession until the hostile squadron sailed away; but not before the British frigate closed in with the brig and captured her.

In March 1811, Captain William Hoste of the 32-gun frigate "Amphion," was cruising in the Adriatic in company with the frigates, "Active," 38, "Cerberus," 32, and "Volage," 28. He was on the look-out for a French squadron under Commodore Dubourdieu, who proposed to attack the island of Lissa. On the 13th March Hoste sighted the enemy in the shape of four French and three Venetian frigates, together with various small craft, carrying 500 troops. As the enemy carried 300 guns and 2500 men to the British 154 guns and 880 men, Hoste might have been excused had he waited for reinforcements before giving battle to Dubourdieu,

who, naturally, was very confident of success.

The French bore down in double line, our vessels being in one. Hoste hoisted the signal, "Remember Nelson," which simply

electrified the men of his little squadron. Dubourdieu; on the "Favourite," led the attack and was fired into by the "Amphion" and "Active." The Frenchman's plan was to wear and thus place his opponents between two fires, but the "Favourite" failed in the attempt, struck on some rocks and filled. The "Flore" and "Bellone" next treated the "Amphion" to a heavy fire, whereupon Hoste crossed the bows of the "Flore"; and at pistol range broadsided her, and caused her to strike within ten minutes; and an hour later the "Bellone" also surrendered. Meanwhile the "Volage" engaged the 40-gun "Danae," and the "Cerberus" tackled the "Corona" and "Carolina." When the "Amphion" was at liberty, she came to the assistance of her consorts, and the three hostile frigates bore up and sailed away. The "Active," however, gave chase and captured the "Corona." As the "Amphion's" davits were damaged, she could not launch a boat to take possession of the "Flore," whose captain rehoisted his colours and got away with his flying consorts. The British losses were 45 killed and 144 wounded, among the latter being the gallant Hoste.

In 1812 Great Britain became embroiled with the United States, the quarrel arising chiefly out of the ever-vexed question of the rights of neutral ships engaged in commerce during wartime. We had forbidden neutrals to trade with the ports of France, and when we blockaded the enemy's ports, it was extremely difficult for any neutral ship to run the gauntlet. This was a great blow to American trade and caused much irritation in that country. Another grievance was the British practice of searching American ships, and impressing into our service any British seamen serving under the American flag, for not a few of our men now preferred the better conditions of

service and higher pay offered under the Stars and Stripes.

Our Navy at this time consisted of between six and seven hundred ships, and as Mr Theodore Roosevelt remarks in "The naval war of 1812," "England's naval power stood at a height never reached before or since by that of any other nation. On every sea her Navies rode not only triumphant, but with none to dispute her sway." On the other hand the American Navy was in its infancy, and comprised only about half a dozen frigates and a few sloops and brigs. These frigates, however, were deceptive, as we were to learn to our cost. They were of 1450 tons burden, and were really 74's cut down and armed with 56 heavy guns, 24 pounders, 18-pounders, and carronades throwing 42-pound-shot. Carrying their gun ports high out of the water, the American frigates have been well described as "line-of-battle-ships in disguise." Two of this class were the "President" and "Constitution." Of 38-gun frigates, an excellent example was the "Chesapeake, which was destined to make naval history.

War was declared on 18th June, 1812, and three days later the first shot was fired between the "Belvidera," 36, Captain Richard

Byron, and an American squadron, consisting of the "President" and "United States," 44's, "Congress," 36, and a couple of sloops, which were seeking a British merchant fleet bound from Jamaica. Captain Byron made sail and cleared for action. The "President" came up and by excellent gunnery hulled the British ship several times, to which the "Belvidera" replied with fair effect, while she kept on her course and made good use of her stern chasers. Byron was thankful that the other American ships had not got into range; and during the night he altered his course, and got clear away, with the loss of two men killed and 22 wounded.

On August 19th the British 48-gun frigate "Guerrière," Captain James Dacres, fell in with the "Constitution," which led to a close and most sanguinary engagement. Although Dacres fought his ship with the utmost gallantry, his crew of 263, with their 18-pounders could not cope with 476 picked seamen and marksmen, and the "Constitution's" 24-pounders. Not until the "Guerrière" was a helpless log was the Union Jack hauled down, by which time she had lost 15 men killed and 63 wounded. The Americans found it impossible to keep their prize above water, and she was burned after the prisoners and wounded had been removed. A week later the "Constitution" captured the "Java," 38, after another desperate resistance; and various other British single ships met with a similar fate about the same time.

Our 38-gun frigate "Macedonia," Captain Carden, encountered the "United States" in October, and again heavier metal and good gunnery led to the capture of a British ship. When Captain Carden was taken aboard the enemy's vessel, he found that every one of the crew had served at least five years on board a British warship, some of them, indeed, had fought on the "Victory" at Trafalgar. Efforts were made to induce the crew of the "Macedonia" to enlist under the American flag, but Carden's men refused the higher pay with contempt.

These irritating disasters to British arms were not always due to the enemy's heavier guns or the handling of them, or the superiority of the vessel in size and strength of crew. The truth was that British gunnery had declined to a large extent. Formerly it was the invariable rule for our gunners to be exercised every day, whereas now on many ships there was never any firing at a target. When the Americans fell in with a British captain, who followed the precepts of Lord St Vincent and his capable successors, the result of the conflict told a different story, which leads us to one of the most exciting and attractive incidents of the whole war, namely, the inspiriting duel between the British "Shannon" and the American "Chesapeake."

Nominally the "Shannon" was a 38-gun frigate, but she carried fifty guns in reality, the gun deck armament consisting of 18-pounders, while on the upper deck were 32-pounder carronades; and there was a complement of small ordnance. Her captain



THE ACTION BETWEEN THE "SHANNON" AND THE "CHESAPEAKE, (From the Picture in the possession of Lady de Saumatez)

was Philip Broke, a most able officer, who had trained his gunners to a high state of efficiency. His ship had been in commission for several years and at least twice a week her guns were fired at targets. Broke really grieved at the defeats which the Americans inflicted on us, and was most anxious to pit his gunners against the best American ship of the "Shannon's" class. At this time, May 1813. the British ship was cruising outside Boston harbour, wherein lay the "Chesapeake," which mounted a couple of carronades more than the British ship, and her crew was bigger by 50 men.

Captain Broke sent a formal challenge to Captain James Lawrence of the "Chesapeake" on 1st June, in the hope of provoking the American to come out and engage his ship. Lawrence had been delayed in fitting out, and had intended to put to sea whenever his ship was ready. Broke's challenge, in fact, did not reach him, for the "Chesapeake" came out of harbour, and passed the

boat in which was the messenger.

The "Shannon" at once stood out under easy canvas, so as to be well clear of the harbour, until about 5 p.m. she hauled up to await her antagonist. At 5.40 the "Chesapeake" came down at a fast rate on the "Shannon's" starboard quarter, and when only a hundred yards separated the rivals, the action commenced. Broke's training shewed at the outset, for practically every shot found its mark, and the "Chesapeake's" return fire was markedly less destructive. When the American's head-sails were shot away, she came up into the wind and was exposed to a raking fire that swept her deck and inflicted heavy loss. With her stern and quarter opposed to the British broadside, the "Chesapeake's" crew was thrown into confusion, and, making stern-way, fell on board the "Shannon" with her quarter pressing upon the side of her opponent. Captain Broke called out for the ships to be lashed together, and ordering his main-deck boarders away, he headed the quarter-deck men as they swarmed over the "Chesapeake's" bulwarks. On the upper deck there were few Americans left to resist the boarders, and they were quickly overpowered; but there was a mêlée on the forecastle in which Broke was called upon to face three opponents at the same time. He cut one down, but from the others he got a cutlass cut and a blow on the head from the butt end of a musket. When they saw their leader stunned and bleeding, the British seamen, vastly enraged, made a clean sweep of that part of the ship.

Save for stray shots from the hatchways, the battle was now at an end, and a few volleys fired down below convinced the Americans that further resistance was useless, and a cry came up from the hold that they surrendered. The American colours were hauled down, and then occurred a regrettable mistake. Lieutenant Watt intended to hoist the British flag above the Stars and Stripes, but in his hurry he placed the American flag uppermost. By this



CAPTAIN BROKE HEADED THE QUARTER-DECK MEN AS THEY SWARMED OVER THE "CHESAPEAKE'S" BULWARKS

time the "Shannon" had drifted a little apart from the "Chesapeake." As soon as our gunners saw the American flag go up first, they supposed that Broke was being worsted, and instantly let fly, killing the unfortunate Watt and several of his companions. The flags were then hoisted properly, and the stern struggle was at an end.

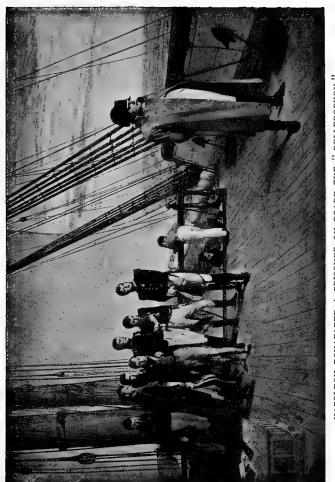
Only fifteen minutes elapsed from the firing of the first shot, until Broke had got possession of the enemy. Neither ship was much damaged up aloft, but both received many shots in their hulls, the "Chesapeake" having been struck by 360 shot of different kinds. The "Shannon's" losses were 24 killed and 59 wounded, while the Americans had over 50 killed or mortally wounded (among them Captain Lawrence); and quite a hundred received wounds, slight and severe. In Great Britain the victory was celebrated with whole-souled joy. Captain Broke was made a baronet. "No other British captain has ever won such honour by a single-ship action. No other fight between frigates has ever been so enthusiastically commemorated by the victor's countrymen." The reason was not far to seek. After twenty years of almost continuous war, in which we had held our own against huge odds, and had scored naval successes such as no other country could boast, we had met. with a succession of frigate defeats, that set the nation at large longing for a victory which would prove to the world that British seamen were as good as ever, and the equals of those who had built up our fame. Captain Broke's victory restored the national pride.

The United States could not meet our line-of-battle-ships at sea, nor could she undertake over-sea expeditions; but she attempted to do us injury in Canada by means of a naval force on the great lakes. Here we suffered two disasters: a squadron of six British ships struck to a more powerful force on Lake Erie in September 1813, and in 1814 a squadron of eight surrendered to

nearly double the number of American ships.

The war with America need not be described at further length. We commenced it by underrating the enemy and sending against her old and weak ships—and paid for it. The abdication of Napoleon Bonaparte allowed us to devote more serious attention to America; and thus we find an expedition organised against Washington, the capital, which was captured, and the principal buildings and dockyards destroyed. Operations against Baltimore and New Orleans did not prove so successful, but owing more to insufficiency of troops than any shortcoming of the fleet. The Treaty of Ghent in December 1814 put an end to the hostilities.

The war with the Americans was a miserable affair, and when we established a close blockade of their ports it could only ruin their trade, which had become exceedingly prosperous during the last twenty years. Occasionally a swift American privateer would escape the cordon and gain the high seas to capture and burn our



NAPOLEON BONAPARTE A PRISONER ON BOARD THE "BELLEROPHON"

merchant ships. London merchants groaned while the insurance premiums rose higher and higher; but all the time our over-sea trade increased in spite of our enemies, while that of America vanished almost to nothing. During the thirty months that the war lasted we captured nearly a thousand American merchantmen.

For nearly a quarter of a century Great Britain had withstood France, and never once did we get under the heel of Bonaparte, which was the fate, at one time or other, of nearly every country in Europe. During the period of our war with America the star of Bonaparte had been declining. Since 1808 Wellesley had been shattering the tyrant's schemes in Portugal and Spain. In the latter part of 1812 he lost an immense army in an advance upon and retreat from Moscow, followed by the uniting of Austria, Prussia and Russia against him. On 18th October 1813, the allies inflicted a crushing defeat on him at Leipsic, followed by an invasion of France and the capture of Paris. Bonaparte abdicated and was conveyed a prisoner to Elba in the 38-gun frigate, "Undaunted," Captain Ussher. In February 1815 he escaped from Elba and returned swiftly to France, and in a very short time he had a quarter of a million soldiers at his command. In June he was defeated by Wellington at Waterloo, and, finding it impossible to evade our cruisers which surrounded the coast of France. Bonaparte surrendered himself to Captain Maitland, on board the "Bellerophon," 74, in Basque Roads. In this ship he was conveyed to Plymouth, and there transferred to the "Northumberland," Rear-Admiral Sir George Cockburn, who conveyed the ex-emperor to St Helena, where he remained in exile until his death on 5th May 1821.

The Peace of Paris, signed on 15th November 1815, secured to Great Britain a tranquillity that was to last for nearly forty years, a relaxation that we needed sorely after the long and incessant drain upon our resources. We restored to France and Holland most of the possessions we had wrested from them during the protracted hostilities; but we retained the Cape of Good Hope and Mauritius to secure our route to India; our authority in the Mediterranean was guaranteed by the acquisition of Malta; and our position was

strengthened in the West Indies.

During our long sustained war with France and various nations, commencing with the rupture with France in May 1803, we captured from the French 26 ships-of-the-line and 55 frigates, and destroyed 9 ships-of-the-line and 15 frigates; from the Dutch 10 ships taken and destroyed; from the Danes, 18 ships-of-the-line and 9 frigates captured, and one destroyed; one Russian ship-of-the-line, 6 Turkish ships, and 4 American frigates captured or destroyed. The grand total was 172 ships-of-the-line and frigates of which 100 were added to our Navy. In the same period we lost 83 frigates captured and 7 destroyed, but only one or two of our ships-of-the-line struck their colours, and did not remain long in possession of the enemy.

CHAPTER XXI

STEAM IN THE NAVY

Upon Great Britain, as Mistress of the Seas, now devolved a task that was for the benefit of all the sea-going nations of the world. Piracy was rife in many quarters of the globe; and the corsairs of the Barbary States were a terror to all voyagers in the Mediterranean, their long course of atrocities being a blot upon civilisation that called imperatively for removal. British admirals, e.g. Sir John Jervis and Nelson, had chastised these African pirates upon occasion, but in 1816 it was decided that piracy and slavery should be tolerated in the Mediterranean no longer.

be tolerated in the Mediterranean no longer.

In March 1816 Lord Expourth, who as S

In March 1816 Lord Exmouth, who as Sir Edward Pellew distinguished himself greatly during the late war, took a squadron to Tripoli and Tunis, and secured the release of many captives in those states, and an agreement to abolish slavery. At Algiers the Dey also liberated many captives, but would not assent to the abolition of Christian slavery; and Lord Exmouth returned to England for instructions. About that time feeling against Algiers was inflamed further by the massacre of the crews of a number of fishing boats by the Dey's troops at Bona, and it was determined

to exact the strictest vengeance.

Lord Exmouth in July sailed from Plymouth on his second expedition, himself in the "Queen Charlotte," roo, and Rear-Admiral David Milne, second-in-command, in the "Impregnable," 98. The squadron consisted of 5 sail-of-the-line, 5 frigates, and half a dozen smaller vessels. Upon arrival at Gibraltar, Lord Exmouth found Baron van de Capellan, with a squadron of 6 Dutch ships, anxious to assist in the correction of the Dey. The joint expedition arrived off Algiers on 27th August. The defences of the city were immensely stronger than in the days of Blake. The various batteries now mounted no less than 1000 guns, and were manned by 4000 fierce and fanatical Moslems; and in the inner harbour were 9 large Algerian frigates and about 50 gunboats.

One more opportunity was given to the Dey to release all Christian captives and to assent to the other wishes of Europe; but, deeming his defences impregnable, he treated the British admiral's demand with contempt. Lord Exmouth, therefore, commenced

his task. He did not propose to bombard at long range, but to get to close quarters. The "Queen Charlotte" led the way, followed by the "Impregnable" and "Superb," 74. The first-named anchored near to the head of the mole, where some of the guns were 68-pounders, said to be 20 feet in length. On the larboard bow of the flagship was the "Leander," 50, with her starboard afterguns directed upon the mole, and her foremost ones upon the fishmarket battery, upon which the "Severn," 40, was bearing her starboard broadside. The "Glasgow," 40, bore her larboard guns on



LORD EXMOUTH
(From the Painting by W. Owen, R.A.)

the town batteries. The "Superb," on the port quarter of the flagship, had got her starboard broadside bearing on the great 60-gun battery, next to that on the mole head, but the "Impregnable" was insufficiently advanced when the firing began, and, at only 500 yards distance, was exposed to the concentrated fire of a couple of batteries. The "Minden," 74, lay between the "Impregnable" and "Superb," and the "Albion" was just astern of her. The Dutch flagship and other vessels were stationed where they were likely to render best service.

After several shots had been fired from the shore the "Queen Charlotte" opened with a broadside, and each ship followed the example as they took up their stations. Three broadsides from Exmouth's great 3-decker razed the end of the mole to its foundation; other of our ships were doing enormous damage elsewhere; and at 2000 yards range the bomb vessels were throwing shells with great accuracy. The Algerines soon found their masonry splintering to pieces; many of their guns were dismounted; and constant showers of round shot were playing havoc generally. The Moslems at first kept up a continuous fire upon our ships, and on the "Impregnable" many of the crew were killed or wounded. The "Glasgow" and "Leander" also suffered severely.

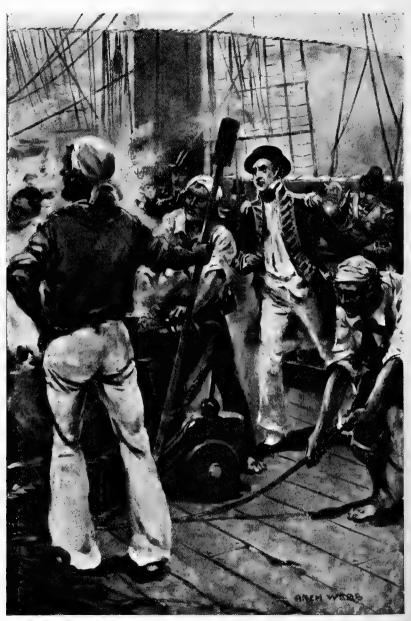
After a while the enemy sent out their gunboats with the intention of boarding our vessels; but these craft were received with broadsides that sank most of them. The barge of the flagship, under the command of Lieutenant Richards, then attacked the nearest Moslem frigate, boarded her, and set her on fire; while shells from the mortar and rocket boats set the greater portion of the enemy's flotilla in flames. Worse was to follow, for the fire was communicated to the arsenal and store-houses, and then to the city itself. The supposed impregnable defences being shattered almost out of recognition, Lord Exmouth about midnight hauled

his whole fleet out of reach of any of the enemy's guns.

On 29th August Captain James Brisbane, of the flagship, went ashore and had an interview with the Dey, who was now most anxious to accede to the admiral's demands. No less than 1200 Christian slaves were given up, most of them being Sicilians and Neapolitans. Sicily and Naples had already paid nearly 400,000 dollars for the redemption of their subjects; this money was now returned; and the British consul received 30,000 dollars as compensation for the loss of his property. This great result, which delivered Christendom from a constant peril, was obtained at a loss of 128 killed and 600 wounded on the British ships, and 13 killed and 52 wounded in the Dutch squadron. The ship that suffered worst was the "Impregnable," which lost 210 men, killed and wounded. It was a bold thing to challenge such powerful batteries at short range; and the brilliant conception of the attack and the gallantry of its execution without the loss of a ship was appreciated by naval men throughout Europe. Lord Exmouth was created a viscount, Rear-Admiral Milne a K.C.B.; the captains were made companions of the same order; and the first lieutenants and other officers were promoted.

With peace at home, our foreign trade was increasing at a rapid rate. For its protection we commenced to police the seas of the world; and our warships dealt out chastisement to corsairs in the Grecian Archipelago, the Malay pirates of Borneo, the pirate junks of China, and the slave dhows of Eastern and Western Africa. In this work for the good of the world and civilisation generally there were many exciting encounters, but a brief account of the sup-

pression of piracy in the Persian Gulf must serve for all.



LORD EXMOUTH ENCOURAGING THE GUNNERS OF THE "QUEEN CHARLOTTE"

A portion of the shores of the Persian Gulf was known as the Pirate Coast, and no less than five tribes of sea-robbers, the Jowassamees, had their headquarters at the town of Ras el Khymah. The depredations of these vermin became so serious that in 1809 an expedition was sent from Bombay against the pirate stronghold. The naval portion of the force consisted of a couple of frigates, two small warships belonging to the East India Company, several brigs and a bomb-vessel; the military contingent comprised the 65th regiment, an artillery detachment, and about 1000 Sepoys. Ras el Khymah was bombarded and stormed, and two-score pirate vessels were burnt, together with magazines and warlike stores. Lingah, on the opposite coast, and Luft, in the island of Kishm, were captured, and more vessels destroyed; and 4000 shot and shell were fired into Sheenaz, near Muscat, before it was carried by storm.

During the ten years that had elapsed, the Jowassamees had forgotten their lesson; there was now no limit to their boldness, and they did not hesitate to capture four British vessels as far from their headquarters as the entrance to the Red Sea. Consequently in September 1819 a second expedition was sent out from Bombay. The naval commander was Captain Francis Collier, while Sir William Grant was in command of the military force of 1700 Europeans and 2500 native soldiers. Ras el Khymah was bombarded by the squadron and again stormed by the soldiers; Sharga and other places were visited next, and forced into abject submission. Ships, stores and everything of an offensive nature were destroyed utterly in every case, and great loss of life inflicted upon the free-booters. This smarting lesson the Jowassamees never forgot, and except for a casual lapse merchantmen have traded with the Persian Gulf in safety.

A small naval force was actively employed during the war between the Indian Government and the King of Burma in 1824-26, although the major portion of the operations were carried out by the military. The squadron consisted of small vessels of the Royal and Indian navies under Commodore Grant, of the "Liffey," 50; Captain Marryatt, the great novelist, was in command of the "Larne," 20. Owing to the ravages of fever constant changes took place in the command, as well as in the captains of the various vessels, which ascended the Irawadi right into the heart of Burma, the troops marching along the river banks. In 1825 Captain T. Alexander was in command; and he was succeeded by Sir James Brisbane. The last-named in turn gave place to Captain Chads, who was present at the final defeat of the Burmese at Pagahm Mew, after which peace was signed at Ava, the capital.

An expedition to the coast of Arracan was commanded by Commodore Hayes. This gallant old seaman had seen service almost without a break since 1782. During the six years, 1797-1803, he was constantly engaged against the pirates who infested the western

coasts of India; in 1811 he took part in the reduction of Java; and now in 1824 he organised and led the Arracan flotilla, manned by 1600 native seamen and 650 Sepoy marines, in addition to European crews. Hayes attacked the stockades of Chumballa with his squadron at only pistol-shot distance, in one of the hottest engagements during the whole of the operations in Burma. At the conclusion of the war the commodore very deservedly was knighted.

The Greeks had been suffering long under the yoke of the Turks, but in 1821 they rose in revolt and endeavoured to secure their freedom. The Sultan called Egypt to his aid, and Ibrahim Pasha took a fleet into Grecian waters to co-operate with the Turkish fleet in coercive operations, that meant nothing less than extermination for the Greeks. The barbarous methods of the Moslems roused all Christendom; and Great Britain, France, and Russia resolved to compel the Porte to acknowledge the independence of Greece, subject to an annual tribute. To enforce this demand the three countries named each sent a squadron to Navarino,

where lay the Turkish fleet.

The British squadron, which was under the command of Vice-Admiral Sir Edward Codrington, who was captain of the "Orion" at the battle of Trafalgar, arrived in September at Navarino in company with the French squadron. At a conference Ibrahim Pasha agreed to suspend hostilities against the Greeks, until he could communicate with the Sultan, but, nevertheless, he contrived to commit many outrages on the defenceless inhabitants of the country adjacent to Navarino, and altogether evaded and trifled with the communications sent to him by the British commanderin-chief. Seeing that further parleying was useless, the allies decided to back their demands by force; and on 19th October Sir Edward Codrington issued instructions to the captains of the combined squadrons. On the next day he hoisted the signal to prepare for action, and stood into the harbour of Navarino; the British and French squadrons formed the weather or starboard column, and the Russians the lee line.

THE COMBINED SQUADRONS

British

Ship.		Guns.	Officer in Command.
"Asia".		80	Vice-Admiral Sir Edward Codrington
			Captain Edward Curzon
" Genoa "	,	74	Commodore Walter Bathurst
" Albion		74	Captain John Ommanney
" Dartmouth "		46	,, Thomas Fellowes
" Glasgow		50	,, Hon. James Maude

Ship.			Guns.	Officer in Command.
" Cambrian "			48	Captain G. Hamilton
" Talbot "			28	" Fred Spencer
One	corve	ette,	3 brigs	and I cutter.

F	<i>Russian</i> Rear-Admiral Heiden							
Rear-Admir								
Ship.		(Guns.		Ship.		(Guns.
'' Syrène ''			60	"	Azof ''			80
"Trident"			80	"	Alexander :	Newsk	y ''	76
" Breslau "			8o	"	Ezekiel "			76
" Scipion "			78		Gargonte"			76
" Armide			48	"	Constantine	e "		48
Two corvettes					Castor "			46
					Elena ''			46
				"	Proveskey	,,		46

Navarino harbour is about six miles in circumference, with the island of Sphacteria across its mouth, leaving an entrance only 600 yards in width. A fortress with 125 guns commanded the right-hand side of the passage, a second fort was almost opposite to it, and at the northern end of the island was a battery with guns directed on the harbour. The Turkish ships were moored inside in the form of a crescent, the largest of them having their broadsides towards the centre; the smaller craft were drawn up inside; and 6 fire-ships were near the entrance to the harbour. The Moslem fleet consisted of one 84-gun ship, two 74's, two 64's, two 60's, two 50's,15 frigates each 48 guns, 26 big corvettes, 11 brigs, 6 fire-ships, and other craft of various kinds.

Although he was quite prepared for battle, Codrington believed the Turks would submit to our demands without active opposition; but Ibrahim Pasha was absent. Bearing up under all sail, the "Asia" led the fleet into the bay, followed by the other ships in two columns. Almost abreast of Codrington was the French flagship. The "Genoa," "Albion," "Dartmouth," and "Talbot" followed the "Asia," which anchored alongside a ship-of-the-line bearing the flag of the Capitan Bey. The "Genoa" brought up abreast a double-banked frigate, on board which was the commander-in-chief of the Egyptian squadron. The Russian admiral took up a position ready to engage some Egyptian ships to windward of the fleet, and others to leeward. The "Armide," "Cambrian," "Glasgow," and "Talbot" were stationed abreast of our three ships-of-the-line; and the "Dartmouth" and smaller vessels were waiting upon the enemy's fire-ships.

It was a matter of surprise that the forts did not open fire as our leading ships entered the harbour. When the "Dartmouth" came up, a boat was sent to request one of the fire-ships to move, so that the frigate could take up the position assigned to her. Believing the mission of the boat to be hostile, the fire-ship opened fire on it, killing a lieutenant and one or two of the crew. The "Dartmouth" replied with musketry, a French vessel followed suit; and other ships believing an action had commenced, the whole line was soon engaged.

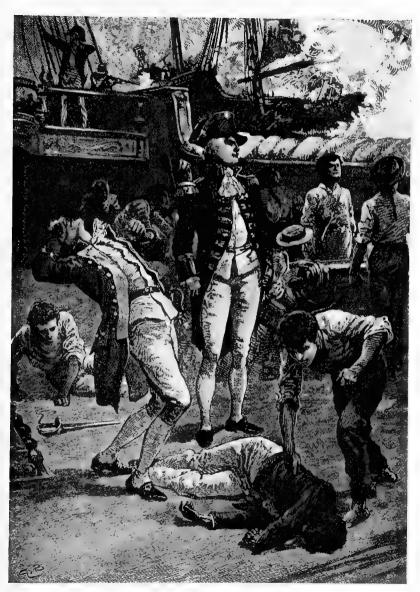
Although at an enormous disadvantage in size of ships, the Turks fought with their usual courage. At first the "Asia" only fired at the Turkish flagship, but when the Egyptian commodore attacked him, Codrington smashed up the pair with terrific broadsides. The "Asia" was then raked severely by the enemy's ships of the inner line; her mizen-mast was shot away and several of her guns were dismounted. The admiral himself was struck by a musket ball, which happily did no more damage than knock his watch out of his pocket.

Owing to the concentrated fire to which she was exposed, the "Genoa" suffered severe losses. Captain Bathurst was struck early by a splinter, which lacerated his face; a little later a shot cut away his coat-tails; and then he was mortally wounded by a grape-shot. The "Albion" endured the fire of a cluster of ships; and when her seamen had repulsed the attempt of a 64-gun ship to board her, they retaliated by capturing the enemy. They promptly relinquished her, when she was discovered to be on fire,

and shortly she blew up with a terrific explosion.

The battle raged furiously for about three hours, the cannonade being almost one uninterrupted crash. The allies at one time were in considerable danger, for the enemy's fire-ships had been ignited and sent adrift, threatening to involve them in a general blaze. But our gallant tars manned boats and towed the blazing hulks out of the way. The conflict commenced about two o'clock. At five the Turkish-Egyptian fleet had disappeared; the bay was covered with their wrecks; only a few of their smaller vessels, or battered, useless hulks, escaped into the inner harbour. The British admiral reported in his official letter: "Out of a fleet composed of 81 ships of war, only 1 frigate and 15 smaller vessels are in a state ever to be again put to sea."

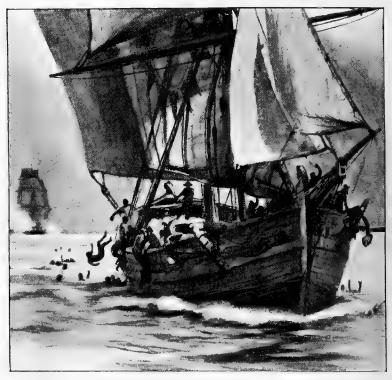
The losses sustained by the British squadron were 75 killed and 197 wounded, out of the total losses of the allies, 177 killed and 480 wounded. Sir Edward Codrington was advanced to a G.C.B. and received the crosses of St Louis from the King of France and St George from the Czar. The captains were made Companions of the Bath; Captain Fellowes also received the ribbon of the Legion of Honour for his instrumentality in saving the French flagship from destruction by the fire-ships; and the commanders, lieutenants, and others were promoted. Before the end of the year the Turks withdrew their troops from the Morea, and Greece



SIR EDWARD CODRINGTON DIRECTING THE FIGHT AT NAVARINO

entered upon a new existence as a republic, succeeded later by a monarchy.

In the days of Queen Elizabeth John Hawkins embarked in the slave trade, and in later years England went in for slave trading with as much enthusiasm as the Spaniards, Dutch, and the French had long been doing in supplying their colonies with cheap labour. It was not until the latter end of the eighteenth century that the



A BRITISH MAN-OF-WAR CHASING A SLAVER

atrocities of the unholy traffic in black slaves engaged the attention of Parliament. In 1788 an Act was passed to regulate the trade, and after twenty years' discussion it was totally abolished in 1807. From that time commenced the assistance of the British Navy in the cause of suffering humanity. "There is perhaps no chapter in the history of the service more gratifying or glorious than that which treats of the devotion displayed, of the sacrifices cheerfully undergone, and the successes attained in the suppression of that most infamous of all traffics, the trade in human flesh and blood." Numberless dashing exploits have been performed by our naval

men on the east and west coasts of Africa in hunting for slavers—the chase, the search, oftentimes the fight with the desperadoes who manned those craft. Frequently the work entailed a pull in a ship's boat of several miles over a glassy sea, under the rays of a tropical sun that made the brain reel.

Although slave trading was abolished in 1807, nothing was done for the poor wretches who were enslaved before the Act was passed. We had been singing "Britons never will be slaves" since "Rule Britannia" was published in 1740, but it was not until 1833 that an Act was passed abolishing slavery in fourteen British colonies, and twenty millions sterling voted as compensation to the slave-owners.

One of the most strenuous actions fought by our cruisers against



BRITISH TARS OPENING THE HOLD OF A SLAVER

the slave trade was the capture in 1830 of a noted Spanish slave-ship, carrying 20 heavy guns and manned by 150 desperate men, by the 16-gun sloop "Primrose," Captain Broughton. This was a particularly heavily armed ship for a slaver, but scores and scores of almost equally meritorious captures could be quoted. In 1841 Commander Hon. J. Denman inflicted a very severe blow on the West African slave trade. Landing at Gallinas, he burnt the barracoons, or fortified buildings, where the slaves were kept until ready for transport from their native land. Denman smashed the boats employed by the slavers, and then took aboard the "Wanderer" 900 slaves for conveyance to Sierra Leone, where they were set at liberty. This settlement was a recognised haven for freed slaves.

For a long period Lagos was a noted slave-dealing depot, but in 1851 Commodore Henry Bruce captured the odious settlement, in the course of which his squadron lost 17 men killed and about 80 wounded. Many Portuguese, Brazilian and other slave-ships obtained their suffering cargoes through the Sooso tribe, who purveyed slaves from the interior. In 1858-9 Commodore Charles Wise punished the Soosos severely; and in 1861 Commodore William Edmonstone, with a handful of British seamen, defeated the King of Porto Novo and his army of 10,000 warriors.

Henry Bell, the father of the steamboat, sent a memorial to the Admiralty in 1800 urging the adoption of steam for warships. The official reply was to the effect that my Lords believed steam to be of no value in transmarine navigation. Bell made another application, only to be frankly told that the Admiralty had no faith in steam navigation. Lord Nelson was present when the Board discussed the matter. His genius led him intuitively to recognise that a new era in navigation was at hand. Said he: "My lords and gentlemen—If you do not adopt Mr Bell's scheme, other nations

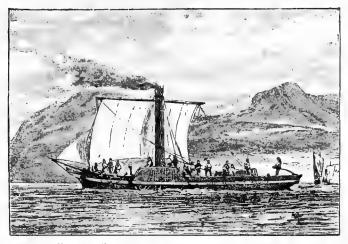
will, and, in the end, vex every vein of this empire."

In the year 1812 there appeared upon the Clyde the "Comet," a 40-feet launch with paddle wheels at the side, worked by an engine of three-horse power. This was the commencement of a revolution in the shipping world that would spell the doom of our wooden walls. In a very short time steam vessels were plying round the coast, and by 1818 there was a regular service of steam packets between Greenock and Belfast. In 1819 the steamship "Savannah," 350 tons, crossed the Atlantic from America to Liverpool; in 1825 the first steam voyage from England to India occupied 113 days; and in 1838 the "Great Western" commenced to voyage regularly backwards and forwards across the Atlantic. Many simple sailor-men were terrified at the clattering machinery and the thrashing of the paddle-wheels of these early steamers. Some hid below deck, and some even made for the shore in fear of "the monster, which was marching on the tides and lighting its path by the fires which it vomited."

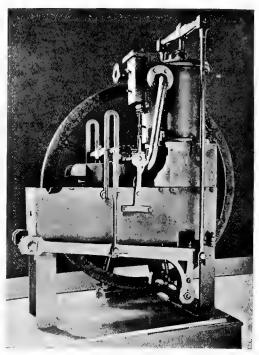
The earliest steam war vessel was the American "Fulton the First," which made her trial trip in 1815. She was double-hulled; length, 156 feet, depth, 20 feet; and she measured 2475 tons. The boiler was on one side, the machinery on the other, and both nearly below the water line; the water-wheel, or paddle, was in the centre of the ship. The gun deck, mounting 20 guns, was 140 feet long, and was protected by wooden walls about 5 feet thick. Fully equipped, the "Fulton the First" accomplished a trip of 53 miles

in less than ten hours.

The British Admiralty still did not view favourably the employment of steam in warships, and our naval men generally were opposed to the notion of "tea kettles" in the service. Speed and independence of sails were all very well, but a shot in a paddle-wheel would make a "lame duck" forthwith, while one among the boilers



THE "COMET"-A REVOLUTION IN THE SHIPPING WORLD



THE ENGINE OF THE "COMET"
(Victoria and Albert Museum)

would be as bad as firing the magazine. It took some years to combat these arguments. For the first quarter of the century there was no steamship on the Navy list, although the Admiralty had purchased the steamer "Monkey," of 210 tons and 80 horse-power in 1821. When the Duke of Clarence, the old friend of Nelson, and afterwards William IV., became Lord High Admiral, he saw the necessity of keeping abreast with the times; and it was solely due to his progressive ideas that the "Active" and "Lightning," our first steam war vessels, were purchased and put into commission in 1828.

The Duke resigned within a year and the question of steam received no further attention until 1830, when Sir Thomas Masterman Hardy beame a senior naval lord. He believed in the future of the steam warships, and persuaded Sir James Graham, the First Lord, to build five paddle-wheel war steamers of 830 tons. Their guns were chiefly 32-pounders, carried on the upper deck; they could steam 8 to 10 knots per hour, but were provided with sails to use in a favourable wind when the paddles would be stopped and coal saved. In due course a larger class of war steamers appeared, and some of these vessels were attached to all our squadrons. At this time political matters distracted attention from the Navy, upon which there was no expenditure that could be avoided. The annual estimate in 1835 was only three millions, and in the first few years of the reign of Queen Victoria, who ascended the throne in 1837, only one or two ships-of-the-line were added to our Navy.

In 1832 the Sultan of Turkey and Mehemet Ali, Viceroy of Egypt, were at strife, resulting in an Egyptian army, under Ibrahim Pasha, invading Syria. The Egyptians defeated the Turks in three pitched battles, overran Asia Minor, and would have occupied Constantinople, but for Russia coming to the aid of the Sultan. Hostilities broke out again in 1839, and Mehemet Ali would make no terms with the Sultan less than the cession of Syria to his own province. Meanwhile Ibrahim Pasha's troops were committing untold atrocities on the Syrians, which caused Great Britain, Austria, Russia and Prussia to lend aid to the Sultan. France was in favour of Mehemet, and the difference of opinion nearly led to war between

her and Great Britain.

Vice-Admiral Sir Robert Stopford was then in command of the Mediterranean, and he was instructed to support the Syrians and assist in expelling the troops of Mehemet Ali. The Mediterranean fleet consisted of the flagship "Princess Charlotte," 104, "Powerful," 84, flag of Commodore Sir Charles Napier, second-incommand; three other 84's, one 92, eight ships ranging from 80's to 72's; the steam frigates "Gorgon," "Vesuvius," "Stromboli," and "Phœnix"; other frigates, corvettes, etc. The "Asia," 84, and "Implacable," 74, were sent to Alexandria to prevent the Pasha's fleet from leaving home; and the rest of the ships Admiral

Stopford took to Beyrout, where he was joined by eight Turkish

and Austrian ships.

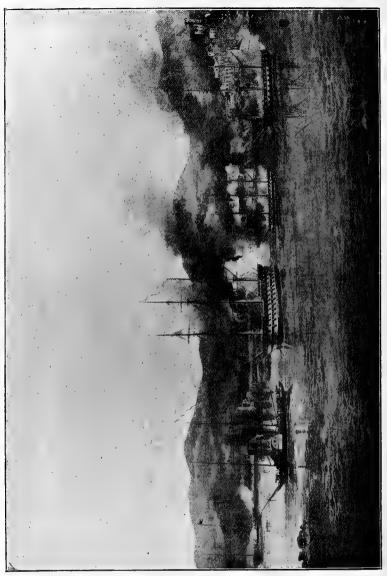
Sir Robert detached various ships to operate against different towns, e.g. Batoum, Caiffa and Tsur, the ancient Tyre. While the main body of the fleet bombarded Beyrout, Napier sailed with a squadron to attack Sidon. There the colonel in command of the allied British and Turkish troops fell ill; and Napier took his place and conducted the land operations, as though he had been bred to the military. In due course the Egyptians were driven from Beyrout, Sidon and other strongholds, and at length only Acre remained to them.

The fortifications of Acre had been strengthened considerably since Sir Sidney Smith assisted in its defence against Bonaparte in 1799. The Egyptians were confident that they could resist any attack from the sea; but Admiral Stopford knew what methods Lord Exmouth had employed at Algiers, and decided to bring his heavy ships close up to the walls of the forts. The principal defences faced south and west, and the fleet was divided into two squadrons to attack accordingly; and the station of each ship was

decided before the operations commenced.

On the morning of 3rd November 1840 the ships stood in to their assigned positions, coming to anchor in a line parallel to the works. The forts opened fire about two o'clock, and for two hours there was a tremendous cannonade, by which time the Egyptian defences had suffered much damage, and their gunners were failing to reply effectively to the broadsides that poured from the line-ofbattle ships. Shortly after four the defenders were paralysed by the explosion of their principal magazine, which contained several thousands of barrels of gunpowder, among which it is believed one of the steam frigates had dropped a shell. The resulting devastation was appalling. Two whole regiments in position near the ramparts ceased to exist; and in fact every living creature within an area of 6000 square yards was annihilated. This crushing blow to the enemy inspired our gunners to more vigorous efforts. Parapets were shattered; guns were displaced, and in some instances split from muzzle to breech. About dusk Admiral Stopford signalled to cease firing; and on the following morning Sir Charles Smith landed the troops, who found that the garrison had fled. Napoleon had failed to capture this fortress, mounting 147 guns; it had taken Ibrahim Pasha ten months to reduce it with 40,000 men; whereas the British fleet smashed it up in the space of two hours, and lost only 12 killed and 32 wounded in the performance; our Austrian and Turkish allies lost about half that number. It should be noted that it was in these operations against the Egyptians that steam warships were employed for the first time in actual war.

The capture of Acre really ended the war, and Mehemet Ali agreed to moderate his ambitions, and be satisfied with the govern-



THE CAPTURE OF SIDON, 23RD SEPTEMBER 1840 STEAMSHIPS FIRST USED IN WAR

ment of Egypt being made hereditary in his family. The victorious fleet received a shower of rewards. Sir Robert Stopford, Commodore Napier, and the officers and men were thanked by Parliament; Sir Robert was given the freedom of the city; the Sultan presented him with a splendid sword; and the sovereigns of the allied powers also rewarded him. Commodore Napier and Captain Walker received the Ribbon of the Bath; the captains were made companions of the order. Nearly a dozen commanders were posted and about eighty lieutenants and mates were promoted.

Steam paddle-ships had not long been established in the Navy, when marine engineers commenced to urge the utility of the screw propeller. The conservative naval man was up in arms at once



(SCREW versus PADDLE)

H.M.S. "RATTLER" TOWING THE PADDLE-STEAMER ALECTO," WHICH WAS STEAMING IN THE OPPOSITE DIRECTION

to ridicule the almost criminal folly of boring a hole in the stern of a ship, in which the screw could revolve in close proximity to the rudder. The screw would have come into general use quickly, but for the fact that it necessitated engines different in design from those used for paddles; and new engines mean prolonged experiments. At length the screw was gaining such favour in the mercantile marine that my Lords of the Admiralty ordered the construction of the "Rattler," a screw-steamer of 850 tons. To assess the value of the screw, it was arranged to pit the "Rattler" against the paddle-steamer "Alecto." The vessels were fastened together, stern to stern, with a strong cable; and then each was set full steam ahead. The "Rattler" came through the ordeal with flying colours, for she towed her opponent at two knots per hour, no matter how vigorously she attempted to paddle in the opposite direction. The result of the contest led to the adoption of the screw in the Navy. But steam, whether paddle or screw, for a long time was

only applied to small vessels. In 1839 appeared the first three-decker of Queen Victoria's reign, namely, the "Queen," 110, manned by 900 men; and it was remarkable, that notwithstanding the advent of steam, this new vessel differed in no material particular from the ships-of-the-line that fought at Trafalgar. It was not



H.M.S. "QUEEN," 110 GUNS. THE FIRST THREE-DECKER OF QUEEN VICTORIA'S REIGN

until about 1850 that the Admiralty thought a two- or three-decker could be anything else but a sailer. In that year several ships, constructing as sailers, were altered to take the requisite machinery. The "Agamemnon" was the first line-of-battle ship to be designed for the screw. Conversion from sail to steam did not present any superabundant difficulty. It was always necessary for sailing ships to carry a considerable amount of heavy ballast; and in

steamships this weight was supplied by the boilers and machinery. We thus now commenced to build up a fleet of wooden steamships; and shortly, when they had undergone the test of stern warfare, it would be proved that a change greater than ever had become absolutely imperative.

Meanwhile our desire to increase our commerce had been causing trouble to brew in the Far East. Although the Chinese viewed all "foreign devils" with suspicion, our trade with that nation was growing to considerable proportions; and in 1834 we sent Lord Napier to Canton on a special mission for the encouragement of trade. Chinese officialdom made it perfectly clear that they desired to have no dealings with us; Lord Napier was insulted; and a couple of British frigates were fired upon. Some British ships were sent to the support of our commissioner, and the batteries that commanded the water approach to Canton received their baptismal fire from our naval gunners, which produced a marked effect on the Celestial mind, and resulted in a speedy promise of amendment in their manners.

By 1839, however, Chinese arrogance was again in the ascendant; our representatives were flouted; and a flotilla of junks attacked two small British vessels in the Canton River. Commodore Sir Gordon Bremer went out with a squadron, carrying a force of troops, to obtain redress. In July 1840 the island of Chusan was captured. In January 1841 Hong-Kong was ceded to Great Britain. As the Chinese viewed a treaty as a dead letter, it became necessary to make an attack on the islands in the Canton River. On the island of Anunghoy were batteries mounting 170 guns, mostly 42-pounders; and on North Wantong were as many, but of heavier calibre. The vessels engaged were the "Blenheim," "Melville," and "Wellesley," 74's, five frigates, and a few smaller vessels. The formidable Chinese defences were bombarded and stormed with success in each case in February; our losses were small but the enemy suffered severely.

Still nearer Canton was a battery of 50 very heavy guns on the island of Whampoa. A body of seamen and marines stormed the battery, while the boats captured a 34-gun ship and scattered a fleet of forty junks. Within the next few days other forts were reduced and Canton itself lay at the Commodore's mercy. The Celestials then desired peace, but only to gain time to fortify the city during the fruitless negotiations. British patience being exhausted, Captain Thomas Herbert landed a naval brigade of 1000 men to assist the military under Sir Hugh Gough. On 19th May the imperial city was captured; and eight days later the Chinese agreed to ransom it for the sum of 6,000,000 dollars.

In this month Rear-Admiral William Parker took command of the squadron, and he decided to reduce Amoy, while the negotiations were proceeding at Canton concerning the ransom. Although

Amoy itself was defended by 150 guns, and further protected by 76 guns on the island of Kalongsen in the harbour, the city was in the hands of the British admiral on 26th May. In September Chusan received another visit and was treated to a heavy cannonade. Chinghae, on the opposite mainland, found its walls and batteries of no avail against the British guns and the storming parties of soldiers, seamen, and marines. Ningpo showed discretion by surrendering without a shot, and the year was rounded off by the 55th Regiment defeating a Chinese army, while the ships repelled attacks by fire-rafts that the Celestials sent against them at Chusan,

Chinghae, and Ningpo. As it was evident that the Chinese still failed to realise British power, Admiral Parker determined to impress them by taking the squadron up to the walls of Nanking, the renowned ancient capital of the empire, which entailed penetrating 200 miles up the river Yang-tse-kiang. In June 1842 the squadron arrived off the mouth of the river. The batteries at Woosung and Shanghai gave little trouble and both towns were captured. Progress towards Nanking was slow, for the river had to be surveyed and marked by buoys to enable the fleet of 70 sail (including transports) to navigate the channel safely. But early in August Admiral Parker had overcome all difficulties, and was at anchor within a mile of the fortifications of Nanking. This hostile force in the heart of the country created a profound impression on the Chinese authorities, who begged the admiral and general to stay their hands until the arrival of peace commissioners, already on their way from the emperor. At the end of the month a treaty was signed on board the flagship "Cornwallis," by which China confirmed to us the possession of Hong-Kong, and agreed to throw open to trade the ports of Canton, Amoy, Ningpo, Shanghai, and Foochow.

Arctic exploration may appear to lie outside the province of our subject, but it is the Navy's concern to be interested in any water in the world where a ship can float. For ages it was the dream of British navigators to discover the North-West-Passage. Sir Hugh Willoughby in 1553 was the first Englishman to endeavour to conquer the regions where Nature hugged her secrets to her frozen breast. In 1773 the fifteen-year old Nelson was at Spitzbergen with Commodore Phipps, in charge of an Arctic expedition fitted out by the Admiralty. At various intervals there were other expeditions to the icy regions; but of all Arctic explorers none excited such pathetic interest as Sir John Franklin. As a boy he served on the "Polyphemus" at the battle of Copenhagen, and was aboard the "Bellerophon" at Trafalgar. In later years he fought in different parts of the world, and gradually built up a record of some distinction. Several times he was employed in voyages to the Arctic seas, in which he met with more or less success.

A government expedition to discover the North-West-Passage

was fitted out in 1845, and the command was given to Franklin. In May he set sail from the Thames with 134 officers and men in the "Erebus" and "Terror," which had previously voyaged to the Antarctic regions under Sir James Ross. In July a whaler encountered the two ships in Baffin Bay and all was well with them. That was the last time they were sighted by human eyes!

Nothing being heard of the expedition for two years, Sir James Ross went out in search of it, but returned in 1849 without discovering the faintest trace of the missing explorer and his companions. The Government offered a reward of £20,000 for even news of Franklin. In a single year as many as five search expeditions set

out for the north, but all that was discovered were traces of Franklin on Beechy Island. near Wellington Channel, which showed that he had wintered there. When it was practically certain that Franklin and his party had perished, the Government ceased sending out searchexpeditions. But Lady Franklin would not give up the quest. She bought a steam yacht, the "Fox," and Captain M'Clintock set out in her in July 1857. This voyage settled the question of Franklin's fate. Articles belonging to the ships, together with skeletons, told their own sad story. At Port Victory in a cairn was discovered a tin case containing a record of the pro-



SIR JOHN FRANKLIN

gress of the expedition up to 25th April 1848, three years after leaving England; although Sir John Franklin had died on 11th June 1847. The crews had been reduced to 105 men, who were forced to leave their ships to traverse a world of ice in the hope of making the Great Fish River. Not a single soul ever arrived there. The Frost King captured every one of the doomed explorers.

Captain M'Clure, in 1853, set at rest all doubts concerning the North-West-Passage, by sailing through Behring Strait and skirting the northern coast of America until he gained the Atlantic, for which he was rewarded with a kinghthood and £5000. When the Passage had been traversed, explorers set their ambitions on the discovery of the North and South Poles. For long years the Poles defied the exploring mariners of the nations to penetrate their secrets, but at last they were conquered, but in neither case by an English-

man although in recent years Shackleton and Scott indelibly inscribed their names in the annals of Antarctic exploration.

Not only in the Far East was our Navy called upon to fight for our commercial interests, but also in South America. Between 1810 and 1824 Peru, Chili, Argentina, Paraguay, and Uruguay threw off the Spanish yoke. Becoming independent states, they quarrelled among themselves. A bone of contention between Brazil and Argentina was the possession of the province of Banda Oriental, wherein was the important seaport of Monte Video, which meantime was seized by General Rosas, the ex-president of Uruguay. The result of the quarrel was the closing of the Rio de la Plata to foreign commerce, contrary to treaty. Rosas was at first opposed by the famous Garibaldi, who raised a force of 500 Italian colonists. As the struggle showed no signs of termination and commerce was at a standstill, Great Britain and France sent out an expedition to enforce the treaty rights by arms.

The British squadron engaged in this service consisted of the steamers "Gorgon," Captain Hotham, and "Firebrand," Captain Hope, with several smaller vessels. Rear-Admiral S. H. Inglefield flew his flag in the "Firebrand." The French flagship was the "San Martin," Captain Trehouat, which was accompanied by five other ships. Rosas was holding the town of Colonia, on the north shore of the Plate, but his troops retired almost at the first shots from the ships. At Obligado, about 100 miles from the mouth, Rosas had constructed on the right bank of the river powerful batteries, mounting 22 guns, from which extended field pieces well placed to command the stream. Across the channel were twenty or more empty vessels, securely moored, and connected by three massive chains; and beyond the barrier were three gun boats to frustrate any attempt at chain cutting.

The combined squadrons ascended the river; and on 18th November 1845 anchored a few miles below Obligado. After occupying two days in surveying the enemy's position and deciding upon the plan of assault, the allied ships commenced their attack at 8.30 The first ships to come under fire were the "Philomel" and "Fanny" (British), and the "Expeditive" and "Procida" (French), and as the other ships came up, the action became general. About midday Captain Hope, in a boat under a heavy fire, succeeded in cutting the chains between two of the vessels in the boom. With the provision of a clear passage, the steamers passed through and raked the forts, which had the effect of diminishing the enemy's fire, and facilitated the landing of storming parties. The enemy offered but little opposition to the sailors, who destroyed the guns before returning to the ships, leaving the gunners to complete the demolition of the forts on the next day. The British casualties were about thirty killed and wounded, a total that did not exceed the losses in the French flagship alone, which had occupied a most

exposed position.

When the squadrons had opened up the river to commerce as far as Corrientes, they returned, bringing with them a convoy of merchant vessels that had long been kept locked up. In the meantime, however, Rosas had thrown up batteries at San Lorenzo in the hope of opposing the ships successfully on their return. His plans came to naught, for from the opposite banks just above San Lorenzo the British sent rockets amid the enemy, who fell into great confusion, which was increased when the steamships poured in a heavy fire, while the merchantmen got safely past the danger spot. This practically ended the work of the expedition, in which both British and French seamen displayed courage and pertinacity of a high order.

Notwithstanding the loss of considerable territory as the outcome of the war of 1824-26, the Burmese were now giving us fresh provocation. Our traders were hampered by all kinds of irritating restrictions, that sometimes extended to imprisonment and even torture. Negotiations leading to no reparation or amendment, Lord Dalhousie, Governor-General of India, furnished 5000 troops for service with a squadron under Commodore Rowley Lambert, of the "Fox," 40 guns. The town of Martaban was speedily reduced, but Rangoon had been strongly fortified since the last war, and its capture presented greater difficulty. On 11th April 1852 the ships of the squadron cannonaded the Burmese batteries; troops were landed and the town carried by storm. For operations higher up the river, the war steamers of the East India Company were employed on account of their lighter draught. By the end of July 1853, Bassein, Prome, and Pegu were in our hands, thanks to our uniform successes; although in the previous February a naval brigade under Captain Loch was repulsed at Donnabew. At the conclusion of the war the province of Pegu was annexed to our possessions; and the Irrawadi was opened up to trade under more favourable conditions.

CHAPTER XXII

THE RUSSIAN WAR

In the summer of 1853 Russia invaded Turkey and, as she would not withdraw the troops, the Porte declared war. Great Britain and France sympathised with the "Sick man of Europe" and each sent a fleet through the Dardanelles that came to anchor in the Golden Horn in October. A few weeks later irritation against Russia was increased by the destruction at Sinope of a Turkish frigate squadron, involving the slaughter of their crews of 3000 men, who were given no opportunity to surrender to the six Russian battleships, each 120 guns, that effected this remorseless annihilation.

The British and French fleets entered the Black Sea in January 1854, and the governor of Sebastopol was informed that any further violent acts against Turkey would be resisted by the allies. bearer of the message was Captain Drummond of the "Retribution," and, during his short stay near the harbour, he took careful notes of the stronghold. He reported to his superiors that Sebastopol could not be taken by ships alone, and, in fact, could little more than blockade the port. The Czar recalled his ambassadors from London and Paris, and on 28th March war was declared against him: and as the British and French fleets were in Kavarna Bay, close to Russian waters, hostilities would not be long delayed. But Russia would also be attacked in the Baltic Sea, and for lucidity's sake it will be better to view the two great scenes of operation separately; but it must be noted that many brilliant feats of our sailors are described in the chapter dealing with the Victoria Cross, which was instituted by Queen Victoria in 1856.

The allied fleet in the Black Sea comprised the following vessels:—

British

Ship.	Guns.	Sail or Steam.	Officer in Command.
" Britannia"	. 120	Sail	Vice-Admiral J. W. D. Dundas
			Captain T. Carter
" Trafalgar "	. 120	"	,, H. Greville
" Queen "	. IIO	"	" F. Michell
110			

		4					
Ship.		Sail or Steam.	Offic	cer in Command.			
"Agamemnon"	. 91	Screw	Rear-Ad	miral Sir E. Lyons			
			Captain	T. M. Symonds			
"Albion".	91	Sail	,,	S. Lushington			
"London".	90	,,	"	C. Eden			
"Rodney".	90	,,	,,	C. Graham			
"Vengeance".	84	,,	,,	Lord E. Russell			
"Bellerophon"	80	,,	,,	Lord George Paulet			
"Sanspareil".	70	Screw	,,	Sydney Dacres			
"Leander".	50	Sail	,,	G. St Vincent King			
"Retribution"	28	Paddle	,,	Hon. J. Drummond			
"Terrible".	21	11	,,	J. MacCleverty			
"Furious".	16	,,	,,	W. Loring			
"Tiger".	16	,,	,,	H. Giffard			
"Firebrand".	6	,,	,,	Hyde Parker			
"Sampson".	6	,,	,,	L. T. Jones			
-		.,	,,				

At later periods the foregoing were joined by: a dozen screw or paddle steamers, two of them 31's, two 21's, and the remainder chiefly 6's; and a couple of sail of 50 and 26 guns respectively.

The French fleet, commanded by Admiral Hamelin, consisted of three II4's, four 80's, all sail; one 80 screw, and 4 paddle steamers, of which two were 20's. Later arrived a II4 screw, a 90 screw and an 80 sail.

Against the allied naval forces in the Black Sea, the Russians could pit 14 sail-of-the-line and a few big frigates. Steam had not yet been applied seriously to their warships, which naturally had considerable influence on the naval tactics employed against the enemy.

The "Furious," flying a flag of truce, was sent to Odessa to bring off the British consul and residents, and in opposition to the laws of war the Russian commander opened fire on our paddle steamer. The combined fleets at once sailed for the Russian port, and as reparation, demanded the surrender of all shipping in the harbour. The request being met with refusal, fire was opened on the batteries chiefly by the steamships. Wheeling round in short circles, they delivered their broadsides in succession with tremendous effect. By the middle of the afternoon the Russian guns had been silenced, to which end an explosion in the battery largely assisted. The shipping was then destroyed, together with the docks, barracks, and warlike stores. The British vessels lost only 13 killed and wounded in this demonstration of the utility of steam in the conduct of such an operation.

When the fleet quitted Odessa on 26th April, a few small vessels were left to watch the port. Four days later the "Tiger" went aground, and was exposed to the fire of some Russian field guns using red-hot shot, which could not be returned. Captain Giffard,

THE BOMBARDMENT OF ODESSA, APRIL 1854

who had both legs smashed by a round shot, made desperate efforts to get his ship afloat, but found her immovable. Only when she was in flames did he haul down his flag and leave the ship, which was destroyed later by the blowing up of the magazine. One of the guns of the "Tiger" was recovered from the wreck by the Russians, and it is now in a public park at Odessa "in memory of the victory of 30th April 1854." The Russians never set foot on the "Tiger," nor did they capture her flag, which, nevertheless, is shown as a trophy in St Petersburg. It happens to be the flag of a captured merchantman, whether the Russians believe it or not.

The allies proceeded to Sebastopol, where Captain Mends, in the "Arethusa," 50, reconnoitred the Russian fleet. It was found to consist of at least a dozen ships of 84 guns and 50-gun frigates with smaller vessels. Under an enterprising admiral, able to select his own time for offensive operations, such a powerful armament would have been no easy proposition for the allied fleet; but the Russians

had no intention of putting to sea.

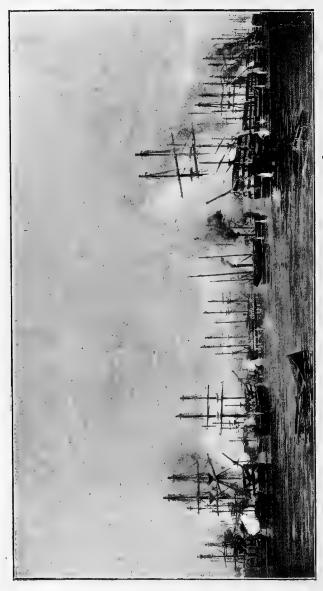
Great Britain and France having decided to invade the Crimea, the fleet did little until the arrival of the troops of the allied armies. A few places were reduced on the coasts of Circassia and Georgia; and some heavy batteries were demolished at the Sulina mouth of the Danube. The last-named was accomplished by Captain Hyde Parker with the "Firebrand" and "Fury," both paddle 6's, and in that affair the gallant officer lost his life. The entire land forces of the allied armies were conveyed to the Crimea in 412 transports; the British troops numbered 27,000 with 60 guns; French, 38,000 men and 68 guns; Turks, 7000 men. This immense force was disembarked between Sebastopol and Eupatoria without the enemy offering any resistance.

The crews of the British warships were chagrined at the failure of an opportunity to try conclusions with the Russian fleet; but 1050 of them were solaced by being formed into a naval brigade with 50 heavy guns for service ashore, under Captain Lushington. On September the allied troops won a great victory at the battle of the Alma, and on 2nd October they encamped before Sebastopol. In the meantime the greater part of the Russian fleet was sunk by Prince Menschikoff at the mouth of the harbour, which was thus

safe from entry by the allied ships.

On 17th October commenced the first bombardment of Sebastopol, the fleet hammering the defences by sea to assist the assault by the army. Unfortunately the French troops were unable to take their share owing to the explosion of a magazine in their lines; and though the British soldiers stuck manfully to their assigned task, the assault could not hope to be successful. The fleet, unaware of this, carried out the naval programme, as arranged with the allied generals.

The north side of the entrance to the harbour had a series of



THE BOMBARDMENT OF SEBASTOPOL, 17TH OCTOBER 1854

strong defences, of which the principal was Fort Constantine, mounting 100 guns. Against these it was decided to oppose a separate squadron, consisting of the "Agamemnon," "Albion," "London," "Sanspareil," and "Arethusa." The remaining British and French ships formed a line from the southern side of the harbour, but not sufficiently near to the batteries to work much damage. The sailing ships were towed into position by the steamships lashed alongside. Admiral Dundas, remembering Algiers and Acre, would have brought more ships closer to the defences, but for the opposition of the French admiral; and thus the inshore squadron had to bear the brunt of the action. Not only did these ships have to engage the guns of Fort Constantine, but also came under a terrific fire from batteries along the top of a cliff to which it was difficult for the ships to reply.

At first the very nearness of our ships to land saved them from the red-hot shot and shell ejected in a continuous stream from the guns of the enemy, who had anticipated a greater range; but when the Russian gunners remedied their shortcoming the British vessels suffered severely. Shortly after two o'clock a shell from the "Agamemnon" struck a magazine in the fort, and the ensuing explosion caused the Russian fire to cease for a very brief period. Shortly it recommenced, and the "Albion" was set on fire and had to be towed out of action; and the "London" and "Arethusa" were reduced to a similar plight. The "Sanspareil," weighing to secure a more favourable situation, left the "Agamemnon" to sustain the fight unaided. Presently her consort returned, and Admiral Dundas signalled the "Queen" and "Rodney" to close up to the aid of the couple. The "Queen" was quickly on fire and the "Rodney" ran on a shoal, but nevertheless Captain Graham rendered good assistance with his guns. Meanwhile the attack on the southern side of the harbour entrance had been maintained by the other ships without much effect on the defences or injury to themselves. At the end of six hours, finding no sign of the assault by the allies on land, the two admirals ceased their efforts, and the combined fleets were withdrawn to repair damages. The "Albion" and "Arethusa" were so crippled that they had to be sent to Constantinople; and the three other ships of the inshore squadron were much damaged in hulls and masts. Particularly was this the case with the 2-decker screw line-of-battle ship, the "Agamemnon." She stood in so close to the Russian fire that there were only two feet of water under her keel. was struck 240 times; her rigging was in shreds; and she was on fire twice. The British losses were 44 killed and 266 wounded, about half of them belonging to the "London" and "Sanspareil" in almost exact proportions.

The battle of Balaclava, with its world-famed charge of the Light Brigade, and the battle of Inkerman, were fought by the

troops within the next three weeks. The naval brigade had been strengthened and more guns were transferred from the fleet to the shore. November 14th witnessed a memorable storm in which we lost a number of vessels, chiefly transports and smaller craft, involving the death of 400 men. The French and the Turks suffered still more severely, and each mourned the loss of a battle-ship. Part of the fleet and the transports retired to Constantinople for the winter; but some of our ships remained off Sebastopol to wrestle with gales and snowstorms, while the allied troops settled down to endure the terrible rigours of the Crimean winter. Admiral Dundas returned to England at Christmas on account of ill-health, and the chief command devolved upon Sir Edmund Lyons.

Early in 1855 there were marked changes in the fleet. "Britannia," "Trafalgar," "Bellerophon," and "Sanspareil" had gone home, and in their place had come out: the "Royal Albert," a magnificent new screw 3-decker of 130 guns, which flew the flag of the new commander-in-chief; the "Hannibal," or, Captain Hay (flag of Rear-Admiral Sir Houston Stewart, secondin-command); "St Jean d'Acre," 101, Captain Hon. H. Keppel; "Princess Royal," 91, Lord Clarence Paget; and "Algiers," 91, Captain Talbot. Captain Lushington returned to England in July and Captain Keppel took command of the naval brigade.

In the last week of February Captain Giffard of the "Leopard," 18, in charge of a small squadron, fell upon a body of the enemy's troops crossing Lake Kouban in boats. He then sailed towards Kertch and intercepted a convoy of guns and stores under escort of 500 Cossacks. He attacked the train and captured 10 guns,

and burnt some barracks and storehouses.

On 9th April the second great bombardment of Sebastopol commenced, but the most harassing attacks of the fleet were almost every night, when some of the ships would stand in and shell the town. It had long been evident that the final assault on Sebastopol would not take place until after a prolonged siege, and while the troops gained slowly on the defences, Sir Edmund Lyons concerted attacks elsewhere. The capture of the Sea of Azof would cut off the grain supplies of the besieged enemy; and consequently a joint expedition of the allied forces sailed for Kertch at the extreme east of the Crimea, and on the straits of that name which lead into the Sea of Azof. The expedition comprised 6 British and 3 French sail-of-the-line, nearly 50 frigates, numerous smaller vessels, 16,000 troops and 6 batteries of artillery. The defenders of Kertch blew up their own works, and at Yenikale the Russians acted similarly. During the conduct of this expedition we destroyed supplies sufficient for 150,000 men for several months, and captured 100 guns, 12,000 tons of coal, and an immense quantity of military stores.

The way was now prepared for an expedition to the Sea of Azof, and thither 13 British steamships and 4 French ships were

THE DEFENDERS OF NERICH BLEW UP THEIR OWN WORKS

despatched in May under Captain Lyons, a son of the commander-inchief, who had recently come to the Crimea from operations in the White Sea. The great grain trade of the south of Russia had been held up for many months, and in the Sea of Azof were many loaded ships that had been waiting to get out to sea with their cargoes. It was from these ship-loads of grain that the garrison of Sebastopol and the Russian troops in the Crimea drew most of their bread supplies. Within but a few days Captain Lyons destroyed 250 grain vessels, and when he had engaged the batteries at Genitchesk and had destroyed the fortress of Taganrog, which was manned by 3000 soldiers, the expedition rejoined the fleet. This very effective service, occupying only a few weeks, practically meant the disappearance of the Russian flag from the Sea of Azof, in the course of which we lost only one small vessel in the navigation of unknown and terribly shallow waters.

The land forces had worked so close up to the defences of Sebastopol that the grand assault was almost in sight. The fleet treated the stronghold to a terrific bombardment on 6th and 7th June, and for the fourth time on the 17th. The shelling by night also continued without intermission. During one of these night bombardments Captain Lyons, on the "Miranda," was wounded by a shell, from the effects of which he died in the hospital of Therapia, to the great grief of the gallant commander-in-chief, and the sincere regret of both fleets and armies. Her Majesty Queen Victoria addressed to the admiral a gracious letter of condolence, in which she said that she and the Prince Consort "mourned over the loss of an officer who proved himself so worthy of his father, and was so bright

an ornament of the service he belonged to."

The final bombardment of Sebastopol commenced on 5th September and did not cease during the two following days. This last stage rested chiefly with the military forces, whose shot and shell burst over the doomed defences like a deadly tornado that increased into a blaze of fire, from which the Russians retreated, blowing up their magazines, and sinking their few remaining ships. Thus ended one of the most memorable sieges in the conflict of nations, notable alike for the grim determination of the attack and its bitter defence for forty-nine weeks, during which 1,500,000 shot and shell were fired into the town and its defences.

The operations against Russia in the Baltic Sea were placed under the command of Vice-Admiral Sir Charles Napier, the gallant hero of many exploits, which he had crowned at Beyrout, Sidon, and Acre fourteen years earlier. But the admiral was now sixty-eight years of age, and with the loss of his physical activity there was less mental alertness; and the responsibilities of a great naval campaign called for the fullest energies of a younger man. Queen Victoria, on 11th March 1854, reviewed our fleet for the Baltic, which was the most magnificent array of ships ever assembled under the Union

Jack. On board her yacht, the "Fairy," Her Majesty received the commanding admiral-in-chief and his captains. To the cheers from a multitude of throats, the thunder of guns, and the martial bray of many bands, the fleet weighed anchor and sailed to the Downs; and afterwards proceeded to the Baltic Sea, a portion of the fleet being in those waters before the declaration of war. When he was finally ready for the fullest operations against the enemy, Sir Charles Napier was in command of the following ships:—

Ship.		(Guns.	Sail or Steam.	Officer in Command.
"Duke of Wellington	on "		130	Screw	Vice-Admiral Sir C.
					Napier
					Commodore Michael
					Seymour
					Captain G. Gordon
"Neptune".			120	Sail	Rear-Admiral Corry
					Captain F. Hutton
"Royal George"			120	Screw	,, Eyres
"St George".			120	Sail	" H. Codrington
"St Jean d'Acre"			IOI	Screw	,, Hon. H. Keppel
" James Watt			91	,,	" G. Elliott
" Majestic " .	•		91	,,	" J. Hope
" Nile".			91	,,	,, Martin
" Princess Royal"			91	,,	" Lord Clarence
					Paget
"Cæsar".			90	,,	" Robb
" Prince Regent"			90	Sail	,, Smith
"Monarch".			84	,,	,, <u>J</u> . Erskine
"Cressy".			80	Screw	" R. Warren
"Boscawen"			70	Sail	" Glanville
"Cumberland			70	Screw	" G. H. Seymour
" Ajax " .			60	"	,, F. Warden
"Blenheim".			60	,,	", Hon. F. Pelham
" Edinburgh "			60	"	Rear-Admiral H. D.
					Chads
					Captain R. Hewlett
" Hogue " .	•	•	60	"	" W. Ramsay

In addition to the above line-of-battle ships there was another score of vessels, from heavy screw frigates of 51 guns to paddle

steamers of 6 guns.

A few weeks after his arrival in the Baltic Napier was joined by a French squadron under Vice-Admiral Deschèsnes, consisting of 8 sail-of-the-line and several frigates. In June the two admirals passed up the Gulf of Finland to offer battle to the Russian fleet, taking with them only 12 British and 6 French ships-of-the-line

with frigates and smaller craft, in the hope that the Russian fleet would be enticed to attack a portion only of the combined fleet. On 26th June the Russian fleet was sighted and was found to consist of 18 sail-of-the-line, etc., lying under the protection of the guns of Cronstadt. The Russian admiral did not propose to risk the security he was enjoying, and Sir Charles Napier and his French colleague agreed that an attack on Cronstadt could not succeed without mortar vessels, and they arrived at the same decision concerning the fortress of Sveabourg. Cronstadt admittedly was strong, for it mounted 670 guns; but British admirals in the past had smashed other supposed impregnable defences by the concentrated fire of powerful squadrons, and a commander-in-chief in his prime at least would have tested Cronstadt.

Upon reconnoitring Bomarsund in the Aland Isles, Napier and Deschèsnes decided to attack and reduce it, as soon as troops could be procured for operations on the landward side. From 24th July the town was closely blockaded, and on 2nd August troops were landed at three different points, the landing being covered by the guns of the "Arrogant," 46. Most of the soldiers employed were French, under General Baraguay d'Hilliers; but Brigadier-General Jones commanded a body of British sappers and 700 seamen and marines. While both divisions pushed forward, the boats of the fleet landed some 32-pounders from the ship, with the necessary stores for the construction of batteries. On the 13th the French general commenced to fire on the West Fort, which was soon silenced. Captain Ramsay of the "Hogue," with a battery of three 32-pounders and some 12-pounder howitzers, attacked the North Fort two days later. The sailors made excellent practice and effected a huge breach in the walls, that caused the commandant to surrender. Meanwhile the fleet had shelled Great Fort, which capitulated before the French general had completed his arrangements to attack it. With the surrender of the tower on Presto Island, which had to endure the cross fire of Captain Ramsay's battery and the "Leopard," 18, "Hecla," 16, and the "Cocyte," 6, (French), the capture of Bomarsund was complete. All its forts were blown up, which concluded the operations in the Baltic for the year. The French ships returned home in September. Sir Charles Napier retired to Kiel, and when the Baltic commenced to freeze the British fleet sailed for England.

Sir Charles Napier was severely criticised at home for his lack of success, for beyond the capture of Bomarsund there had been nothing effective, save the burning of merchandise and keeping the Russian fleet locked up. Fresh operations were undertaken the following year, when a larger fleet went out under Rear-Admiral the Hon. R. Dundas. During the interval a large number of mortar vessels and gunboats had been constructed, so that it was hoped some commensurate result would be obtained.

PART OF THE BRITISH FLEET OFF CRONSTADT

When the French had joined under Admiral Penaud, the two admirals reconnoitred Revel and Cronstadt. The Russian fleet had now less battle-ships ready for sea, but during the winter the defences of Cronstadt had been greatly strengthened by earthworks and other batteries. It was agreed that the place was absolutely impregnable; the British and French admirals decided to attack something less formidable; and after a time proceeded to reconnoitre Sveabourg.

At Hango Head, on 5th June 1855, a body of Finnish soldiers attacked a boat's crew of the "Cossack," 21, whilst engaged in putting some prisoners ashore under the protection of a flag of truce. For this dastardly outrage, in which six of our seamen were killed, four wounded and the remainder taken prisoner, the admiral could obtain no satisfaction. Captain H. R. Yelverton of the "Arrogant," 46, therefore was sent with the "Magicienne," 21, and the gunboat "Ruby" to take vengeance, where he could, on the coast of Finland. He commenced his task by shattering some batteries at Rotinsholm and Svartholm; and when he had worked considerable damage at Lovisa, he made for Viborg. Near that port he was about to attack four vessels, when the "Ruby" struck a submarine barrier, which gave a masked battery an opportunity to fire upon her at exceedingly short range. She got away with only little damage, but Yelverton decided to take no further risks. A month later, in charge of a bigger squadron, Captain Yelverton accomplished some good work against the strong batteries at the mouth of the Kymene river. Rear-Admiral Seymour, who was equally successful at Narva, had a distressing experience that might have cost him his life. of the boats had fished up some kind of infernal machine, planted by the enemy. While the admiral was examining it, the contrivance exploded, injuring several officers and men, and depriving the admiral of the sight of one eye.

At Sveabourg the defences had undergone considerable strengthening since Sir Charles Napier decided to leave them alone, but Dundas and Penaud were of opinion that they could be reduced under plans carefully prepared. Both the allied admirals were present with half a dozen ships-of-the-line, with frigates and paddle steamers; but Dundas and Penaud shifted their flags to gunboats, from which to superintend the arrangements drawn up by Captain B. J. Sulivan. The bombardment of the stronghold was to be effected by twentyone British and French mortars and an equal number of gunboats. The mortars were anchored in line about 4000 yards from the batteries, and ahead were the gunboats, to be kept on the move as they delivered their fire. At 6.45 A.M. on 9th August the mortar vessels opened fire, and such was their accuracy that the first four shells fell on prominent buildings which had been selected as targets. Shells from mortars, being discharged into the air at a high elevation, descend into the interior of buildings, magazines, etc., however

THE BOMBARDMENT OF SVEABOURG

thick the walls. When they explode, they wreak tremendous

damage, and ignite all inflammable substances.

The mortars threw thirty projectiles an hour, and at the end of three hours it was evident that many buildings were in flames; and in numerous loud explosions masonry was hurled up into the air. At sunset the mortar-vessels and gunboats were withdrawn; and during the night, rocket-boats discharged their harassing missiles upon the town and fortress. Next day there was another vigorous bombardment, and at night a further rocket assault enveloped Sveabourg in a sheet of flame. At daybreak the admirals perceived that they had accomplished their task. They had utterly ruined this powerful fortress; without placing the fleet in jeopardy; without the loss of a single life, and only 16 men injured.

In October the fleet proceeded to Seskar, but the Russians would not come out of Cronstadt to tempt fortune in the open sea; in November Admiral Dundas took the fleet to Kiel, sending home his gunboats and sailing vessels; and in December the remainder

of the fleet followed in their wake.

War was also made upon Russia in the White Sea in 1854. The vessels engaged in this expedition were the "Eurydice," 26, Captain Erasmus Ommanney; "Miranda," 15, Captain E. Lyons; and the "Brisk," 14, Commander F. Seymour. In July the "Miranda" and "Brisk" destroyed some batteries on the island of Solovetskoi, after reconnoitring Archangel. A month later Captain Lyons took his ship 30 miles up the river Kola to attack the town of the same name. No ship had ever ascended so far before; but by warping his ship during the last two miles the pertinacious captain at last anchored the "Miranda," about 500 yards distant from the Kola batteries. As the governor refused to surrender, Lyons opened fire on the next morning, and after an energetic duel the British guns proved the better, and set the town on fire. Some of the "Miranda" seamen landed, drove the Russians out of the batteries, destroyed stores and buildings, and carried off the guns to their ship. Shortly afterwards the "Miranda" returned to England and almost immediately proceeded to the Black Sea, where the gallant Lyons lost his life before Sebastopol.

Operations against Russia in the Pacific Ocean ended in failure. In August 1854 Rear-Admiral David Price was in command of the Pacific squadron, consisting of the "President," 50; "Pique," 40; and "Virago," 6; and to these were added the French ships "Forte," 60; "Eurydice," 22; and "Obligado," 12. This combined squadron proceeded to Petropaulovski, where lay two Russian ships, the "Aurora," 44, and "Dwina," 20. Several batteries defended the town and their guns had been increased by the addition of some taken out of the "Aurora." Just when an attack had been organised Admiral Price shot himself in a fit of insanity, and Captain Sir F. Nicholson took command. Although

the squadron was fully prepared, for some unaccountable reason Nicholson delayed the attack for twelve days, and even then only engaged one battery with the "President," "Pique," and "Forte," and at too distant a range for anything effective to result. On the other hand, Commander Marshall of the "Virago" engaged and silenced a smaller battery; and a landing party spiked the

enemy's guns.

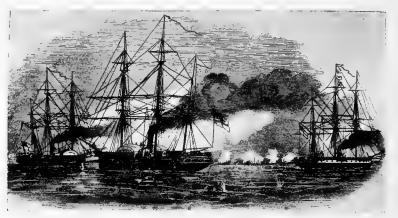
After another spell of inactivity an attack was made upon two other batteries; while the "Virago" towed the boats of the squadron ashore, carrying 700 seamen and marines for an attack on a fort high up at the back of the town. When the landing party left the protection of the ships' guns it marched into an ambush, and suffered terribly from a concealed regiment of Russian sharpshooters; 26 men were killed; many were taken prisoner; and of the remainder, half of them were wounded. The commanders of the combined squadron accepted their defeat with absolute meekness, for they made no attempt to retrieve it, but retired to San Francisco.

What the Russians thought of their defences at Petropaulovski was shown a little later, when they razed the fortifications; and removed the troops, guns and stores to De Castries Bay in the Gulf of Tartary; and the "Aurora" and "Dwina" went with them. In due course another small British squadron under Commodore Hon. C. Elliott appeared outside the bay to challenge the two Russian ships to come out. They had no intention of fighting; and the Commodore not only lacked the grit or energy to go in to them, but failed to watch them with sufficient closeness to prevent their escape. At the close of the war the "Aurora" and "Dwina" returned to the Baltic, proudly boasting that they were "the only ships' crews in the entire navy of their country who had defeated one British squadron and successfully defied another."

With the fall of Sebastopol peace was in the air, but the allies next devised an attack on the ports at the mouth of the Dnieper, which was guarded by Fort Kinburn. Early in October 1855, a joint expedition came to anchor off the Spit. The British ships consisted of 6 ships-of-the-line, 9 steam frigates, 24 steam sloops. with gunboats and mortar-vessels, and several transports carrying 4000 troops. Our French allies contributed more troops, but less ships. The bombardment of Kinburn, however, was notable on account of an innovation in the provision of four armoured floating batteries, which had been designed by the French naval authorities at the instigation of Napoleon III., who had been greatly impressed by the effect of shell fire upon wooden ships. These floating batteries were screw ships of 1400 tons burden and their stout wooden sides were plated with iron 4 inches thick. each mounted eighteen 50-pounders and thus were fitted to achieve some destructive results. Naval men knew of what the guns were capable; they were interested chiefly in observing to what extent the enemy's missiles damaged these novel offensive craft. The armoured screw ships proved to be a revelation, for shot or shell from the batteries either rebounded off the vessels, or burst harmlessly outside them.

The mortar-boats and armoured screw ships bombarded the main fort with its 70 guns for two hours; and then, while the ships-of-the-line attacked the earthworks with 10 guns on the southern side, the steam frigates opened fire on the similar defences on the northern side. In less than a quarter of an hour the fort and batteries surrendered.

Negotiations for the cessation of hostilities now commenced, and the Peace of Paris was signed on 30th March 1856. Its chief



BRITISH STEAM FRIGATES ENGAGING RUSSIAN GUNBOATS OFF CRONSTADT, 1855

terms granted the independence and integrity of the Ottoman Empire; it made the Black Sea and Sea of Azof perfectly open to the merchantmen of all nations; but at the same time these waters were forbidden to the fleets of the Powers.

After fourteen years peace with China, hostilities broke out afresh in October 1856, on account of constant evasions of the treaty of 1842, culminating in the Chinese authorities seizing a small ship sailing under the British flag. Admiral Sir Michael Seymour proceeded to Canton River, where he destroyed many of the Chinese outlying defences and instituted a blockade that put an end to trade. In 1857 the admiral engaged in a series of expeditions against the enemy's war junks that had taken shelter in various creeks, and in this work Sir Harry Keppel rendered brilliant service.

On his way out to join the commander-in-chief, Keppel's ship,

the "Raleigh," a 50-gun frigate, struck an uncharted pinnacle rock, 9 feet below the surface. While he was running the sinking ship for the mud shoals off Macao, the French frigate "Virginie," flag of Rear-Admiral Guérin, appeared. Sir Harry hoisted the French flag and fired a salute. The French rendered all assistance, and eventually the "Raleigh" was run aground; but only to become a complete wreck after the removal of her guns, boats, and stores. When Keppel went aboard the "Virginie," the gallant Guérin no longer thought of nationalities. He embraced and kissed the Englishman, exclaiming, "C'est magnifique! C'est magnifique! A British frigate saluting the French flag while sinking!"

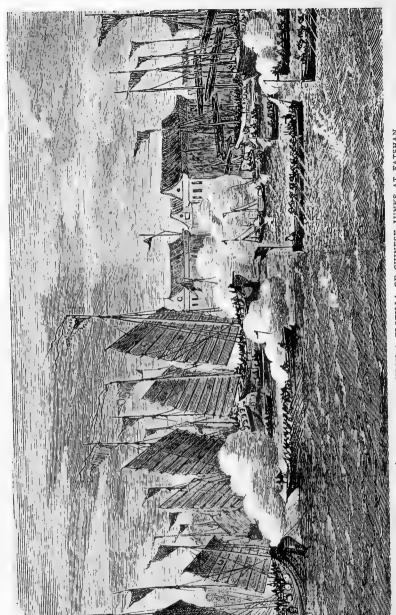
At Fatshan, twelve miles by river from Canton, there were about 80 Chinese war junks. In the middle of Fatshan Channel was Hyacinth Island, and the war junks were placed across both channels, with their guns pointing down stream. Batteries and earthworks lined the shores. It was calculated that the Chinese had got 6000 to 7000 picked men and about 800 guns, with which

to repel the British advance.

Sir Michael Seymour conducted the operations from a small paddle steamer, the "Coramandel." Commodore Keppel was in charge of the advance guard; his broad pennant was hoisted on the gunboat "Hong-Kong," which drew not more than a foot of water. The British attacking force consisted of eleven gunboats and fifty ships' boats from the squadron, that was left at Canton. All told, Seymour's boats carried about 2000 seamen and marines. It was decided to attack at low water. This would make it difficult for the gunboats to proceed amid the shoals and mud banks; but it would also prevent the Chinese junks from escape during, or after, the fight. Operations were commenced at daybreak on 1st June, and it did not take long to capture some of the shore batteries, whose gunners "bolted like rabbits."

One by one the gunboats grounded. When this happened to the "Hong-Kong" Keppel took to a six-oared boat and led the flotilla of boats, leaving the gunboats to "float and scrape on" when the tide rose. Rear-Admiral Montague, who was then one of Keppel's midshipmen, records the battle in his volume, "A Middy's Recollections": "The fire was very heavy: the shot were ricochetting down the river as thick as hail. Some of the junks had eight or ten guns aboard, many of them 32-pounders, besides endless jingalls. They certainly looked very formidable, and were decidedly picturesque, being painted in various colours (generally red and green) and flying streamers and colours on all their masts. We began firing when we reached a distance of 300 yards or so of the junks."

The fight was well described in Keppel's own account which appeared in *The Times*, later in the year. "The first division



KEPPEL'S BOAT ATTACK UPON A FLOTILLA OF CHINESE JUNKS AT FAISHAN

of the Chinese fleet was attacked simultaneously by about 1900 men. I did not take more than a quarter of that number to attack the second division, three miles higher up the river. They were evidently the cream of their fleet, and numbered exactly twenty, in one compact row. I determined to push on. They fired occasional shots, but did not open their heaviest fire until we got to 600 yards' distance, and then I saw how impossible it would be to force our way without reinforcements." Keppel's boat was struck by a shot right amidships, one man being cut in two, and another losing an arm. Presently a second shot crashed through both sides of the boat, injuring another couple of men. "The boat was now filling and I got on one of the seats to keep my legs out of the water, just as a third shot went not more than an inch below the seat on which I was then standing. Many of our boats now got huddled together, the oars of most being shot away. I jumped into one of the 'Calcutta's' boats, pulling our wounded men with us, my dog Mike refusing to leave the dead body of a man, who was his favourite. I then gave the order to retire on the 'Hong-Kong,' and reform abreast of her. . . . When I reached the 'Hong-Kong,' the whole of the enemy's fire seemed centred on her. She was hulled twelve times in a few minutes, her deck was covered with the wounded who had been brought on board from the boats. From the paddle-box I saw reinforcements coming; they were pulling like mad. . . . 'Let us try the row boats once more boys,' I called out, and went over the side into the 'Raleigh' cutter. this moment there arose from the boats one of those British cheers so full of meaning, that I knew at once it was all up with John Chinaman. They might sink thirty boats, but there were thirty others who would go ahead all the faster. . . . I saw the move among the junks, they were breaking ground and moving off, the outermost first. They never ceased to fire. Three more cheers. and then commenced an exciting chase for seven miles. As our shot told on them, they ran ashore and their crews forsook them. Seventeen were come up with in this way and only three escaped."

When Keppel returned with the boats to Sir Michael Seymour off Canton the admiral expressed his high sense of the zeal and gallantry that one and all had displayed; and he informed the Commodore, in writing, that he should bring his services to the notice of the Lord Commissioners of the Admiralty. High quarters put the seal on the admiral's report by bestowing upon Keppel the

K.C.B. and promotion to Rear-Admiral.

Later in the year it was possible to make a determined attack on Canton, for Sir Michael was reinforced by a French squadron and army, sent out to obtain reparation for attacks by the Chinese on French missionaries. Canton was surrounded by a wall, 25 ft. thick at the base, in which were a dozen gates. The city could be bombarded from the river on two sides, but troops were necessary

to assault the eastern face when the defences had been breached. The squadron supplied a naval brigade of 1550 men with a battery of field pieces under Commodore Hon. C. Elliott. Lord Elgin, who had gone out to China as a peace commissioner, remarked to Elliott, as they lay before the doomed city with its population of a million souls, "I feel sad, because when I look at that town I feel that I am earning for myself a place in the Litany, immediately after plague, pestilence, and famine."

The bombardment commenced on 28th December, and continued for two days. The troops, meantime, landed, and when the time came, scaled the walls with ladders, the soldiers and sailors vieing with each other to be first. Chinese resistance was beaten down and the city captured, involving a loss to us of about 130 killed and wounded. Yeh, the tyrant mandarin, escaped, but a few days later was captured by Captain Cooper Key of the "Sans-

pareil" and transported to Calcutta.

A portion of our fleet, together with some French ships, next attacked the forts on the Peiho River. When they had been reduced, the gunboats proceeded to Tientsin, with the intention of advancing upon Peking, the capital. By this time the Chinese desired a cessation of hostilities. An agreement was drawn up by which we secured two important concessions, namely, British subjects to have the right of travelling over China, and a British

ambassador to take up his residence in Peking.

After the lapse of only a few months it proved that the foregoing agreement was quite illusory, for the Chinese had no intention of the treaty taking practical effect. In June 1859, Rear-Admiral James Hope, who had succeeded Sir Michael Seymour, proceeded to the Peiho, having on board Mr Bruce, the newly-appointed minister, who was on his way to Peking to ratify the peace of the previous year. The squadron consisted of the "Chesapeake," "Highflyer," "Magicienne," "Cruiser," "Fury," "Cormorant," and "Nimrod"; and nine gunboats.

Since our last visit the Chinese had restored their forts and mounted them with heavier cannon. Around them they had dug double ditches containing five or six feet of water, and the muddy banks were sprinkled with sharp spikes. In the river channel were fixed immense iron stakes; opposite the main forts was a stout boom of hempen and iron cables; and beyond were two massive rafts that practically blocked the passage of any ascending boats. And all of these aggravating obstacles were covered by the guns of the

Chinese batteries.

The Chinese authorities would not allow the messengers of the British envoy to land, nor would they remove the obstacles in the river to allow the ships to proceed; and nothing remained to be done but to give the Celestials another demonstration of British power. The attack was made on 25th June. The gunboats were assigned



THE REDUCTION OF THE CHINESE DEFENCES AT THE MOUTH OF THE PEIHO, MAY 1858 (After a Picture by Bedwell)

to operate against the Taku forts, the "Opossum" to go forward and endeavour to break the boom. Admiral Hope hoisted his flag in the "Plover." No sooner did the "Opossum" touch the boom than the enemy belched out a tremendous fire, that speedily disabled several of the gunboats. The admiral was forced to transfer to the "Opossum" and later to the "Cormorant"; and when the last named was disabled and he was severely wounded, he had to relinquish the command to Captain Shadwell.

In this desperate situation came generous assistance from the "Toey-wan," Commodore Tatnall, of the American navy, who was a neutral looker-on. Hope sent a midshipman to the "Toey-wan" requesting the American to tow the British boats with their 600 men into action, which would allow him to withdraw. Tatnall hesitated, since his participation would be tantamount to declaration of war by America. But the gallant sailorman could not resist

the appeal, even at the risk of international complications.

"Blood is thicker than water!" he exclaimed. "A brother

sailor is in distress, and I will help him out."

The "Toey-wan" towed the 600 British sailors into action and then Tatnall went in a boat to the "Cormorant" to pay a visit to Hope, who had both his legs broken. As the American boat got alongside a shot struck its stern, killing the coxswain and wounding a lieutenant. Let one of the Americans continue

the story:

"Our boat was smashed and we were all thrown into the water. That was the first time the English had the pleasure of fishing for Yanks. Every time they threw the line over a Yank bit it. . . . The admiral was lying on a settee giving orders the best he could. And we, as naturally as ducks take to water, went forward. The bulwarks were shot away, the guns destroyed, and the decks bloody. The decks had been sanded down to absorb the blood. We went to the bow gun, and stood looking at those four men fighting that gun, where they ought to have had fourteen. . . . They could not fire the gun very often. We stood there watching them strain themselves to fire it. One after another of us dropped in and fought that gun for them, and made the English stand back."

Eventually Admiral Hope abandoned the three gunboats, "Cormorant," "Lee," and "Plover," and withdrew his squadron until the attack could be renewed under more favourable conditions. On this unfortunate day our losses were 85 killed and 350 wounded,

the worst reverse our Navy ever suffered in Eastern waters.

In July of the next year (1860) Admiral Hope was again off the Peiho, with a squadron and transports bearing 10,000 troops, chiefly from India under Sir Hope Grant; and the French contingent included 7000 men under General Montaubon. Upon this occasion, while the gunboats assailed the Taku forts as before, the troops attacked them from the land side, and finally carried

them at the point of the bayonet. The city of Tientsin surrendered on August 23rd; and a couple of months later once more a treaty was concluded, this time under the walls of Peking.

During the war in China there was a misunderstanding with the Shah of Persia, while in India there was an outburst that threatened to destroy the whole fabric of our Indian Empire. To



THE TAKU FORTS FINALLY CARRIED AT THE POINT OF THE BAYONET

settle the Persian difficulty the Indian Navy supplied a squadron of fine steam frigates and sailing corvettes, with a fleet of transports to convey troops under General Stalker. In the days of Clive the naval force of the East India Company was known as the Bombay Marine. For a long period it rendered good service to the Empire, and King William IV constituted it the Indian Navy, granting to its officers commissions equalling the ranks in the Royal service. The present expedition had for its commander-in-chief, Rear-Admiral Sir Henry Leeke. Bushire was bombarded and captured,

after which Sir Henry returned to Bombay. He was succeeded by Commodore Ethersey. Strangely enough this officer and General Stalker both committed suicide, whereupon Commodore

Jenkins took command of the squadron.

The crux of the expedition was the bombardment of Mohamreh near the confluence of the Tigris and Euphrates. At this time the military command was in the hands of Sir James Outram, the second-in-command being Brigadier-General Henry Havelock. Mohamreh was defended by strong earthworks mounted with heavy guns, and defended by 13,000 men. The ships of the squadron were protected by piling bundles of hay along their bulwarks, which afforded shelter from the musketry fire for the seamen at the guns, and the packed soldiers who were in readiness for landing. It was solely a naval affair, for Havelock put it on record in a letter to his wife: "The victory was won by the Indian navy; the troops of my division, which landed in the best order, had not a shot to fire." The war came to an end after an expedition up the Karoon to Ahwaz, where Acting-Commodore Rennie, with 6 gunboats and 300 troops, routed an army of 8000 Persians.

The Indian Mutiny is a terribly black page in the history of the British nation. When Sir Michael Seymour was before Canton in the summer of 1857, Lord Elgin arrived at Hong-Kong on board the "Shannon," 51, Captain Peel. They brought news that the native troops in India were in revolt, and that Lord Canning, the Governor-General, required all assistance that could be spared. Seymour not only at once despatched the "Shannon," "Sanspareil," and "Pearl," but gave orders for troops that were on their way out

to China to be diverted to India.

The three ships arrived in the Bay of Bengal in August. The "Sanspareil" was taken by Captain Key up the Hooghly to Calcutta, where no line-of-battleship had been seen for a century; and where the presence of a fighting crew had a wholesome effect, and probably did much to prevent disaffection spreading to the capital. Captain Sotheby of the "Pearl" formed a small but very effective naval brigade, that performed well on the frontier of Oude; and in the course of several important actions, his force was successful on every occasion.

Before going on to Captain Peel's part in assisting to quell the great Sepoy revolt, it must be made clear that the "Shannon," then the fourth of her name, was not the vessel so ably fought by Captain Broke against the "Chesapeake" in 1813. Peel's ship was a steam frigate, mounting 51 guns, launched shortly before the close of the Crimean War at which time Peel was captain of the "Diamond," 26, before Sebastopol. The gallant captain left his ship to serve with Lushington's naval brigade, and it was his conduct in this service that caused Lord Wolseley to describe him as the bravest man he ever saw. "It was his invariable practice to walk about behind

his battery . . . where he had little or no protection from the enemy's fire. I can see him now, with his telescope under his arm in quarter-deck fashion, directing the attention of his men in charge of guns to some particular spot in the Redan or Malakoff. His men could always see him; all felt that his eye was upon them; and if he in that exposed position made so light of his great danger, they could not presume to wince under the shelter which the battery provided." The story of how Captain Peel gained his thrice-won Victoria Cross is told in a later chapter.

The "Shannon" arrived at Calcutta before the "Sanspareil." Captain Peel arranged for sufficient men to be left aboard his ship to direct a broadside on the city, if occasion called for it, while he set out with 390 seamen and marines for Lucknow to assist General Havelock in its relief. He took with him six 8-inch guns, 68-pounders; two 8-inch howitzers, 24-pounders; two field-pieces and a battery of 8 rockets. Never before had such tremendous ordnance as 68-pounders been worked as field-pieces. Sir Colin Campbell, the commander-in-chief, said that in all his vast experience he had seen nothing like the ease and dexterity with which

the seamen handled their big guns in action.

It was the middle of October before the "Shannon's" brigade reached Allahabad, for the Ganges was in flood and the small steamers, that towed the flats carrying the force, only made slow progress against the strong current. It was not time wasted, however. Army drill and musketry practice went on aboard the flats every day, and as they had to anchor each night, the men always landed for skirmishing exercises, etc. Consequently, when the force landed at Allahabad, the men were thoroughly fit and ready to tackle the enemy in any guise, anywhere. As Lieutenant Vaughan now joined his captain with a further force of about 120 seamen, whom he had enlisted from amongst the merchant crews at Calcutta,

the whole brigade mustered about 500 men of all ranks.

Captain Peel and his force garrisoned Allahabad for a time, and a portion of the brigade assisted some 400 soldiers in an action in which Colonel Powell of the 53rd was killed. Peel then took the command and routed the mutineers, slaying 300 and capturing their guns and ammunition. In the first relief of Lucknow the brigade operated splendidly, especially at Shah Nujeef. In his official report the commander-in-chief said: "Bringing up heavy guns with extraordinary gallantry within a few yards of the Shah Nujeef to batter the massive stone walls, was an action almost unexampled in war; and Captain Peel behaved very much as if he had been laying the 'Shannon' alongside an enemy's frigate." brigade lost 18 killed and wounded that day, which also saw four V.č.'s won by the "Shannon's" men.

On the next day (17th November) after the storming of the Mess House, the relief of Lucknow was an accomplished fact. "Almost the first white faces I saw," said Outram later, "were the hearty, jolly, smiling faces of the 'Shannon' men, who were pounding away with two big guns at the palace. There they were, working in the open plain, without screen or rampart of any kind,



CAPTAIN PEEL AND THE "SHANNON" MEN AT CAWNPORE

working their guns within musket range of the enemy, as coolly as if they were practising at a Woolwich target."

When Sir Colin Campbell proceeded to Cawnpore to assist the hard-pressed force there, the "Shannon's" went out with him. There was fighting in nearly every mile of the way, winding up with a fierce engagement with the cream of the mutineers. When the enemy opened on the British with a terrible cannonade of shot, shell and grape, Peel's bluejackets could not get into action

quickly enough to please them owing to the slowness of the bullock teams that drew the guns. They called to the 93rd to lend a hand as they had done at Lucknow. The soldiers knew the value of their naval friends, and, slinging their rifles, a company dashed to help in manning the drag ropes; and the 24-pounders were wheeled abreast of the first line of skirmishers, as if they had been light field-pieces.

In February, 1858, Sir Colin commenced his second advance on Lucknow, and early in March the "Shannon's" men assisted him to storm Dilkoosha, and afterwards breached the walls of Martinière. Here Captain Peel was wounded by a musket shot in the thigh. Lieutenant Vaughan took the command, and led the brigade, while Lucknow was won step by step. On 13th March the fifth "Shannon" man won his Cross. A day later Vaughan headed the daring operation of blowing up one of the gates of the Kaiserbagh; and in less than a week the rebel army had been cleared out of Lucknow and its neighbourhood.

During these final operations Captain Peel was making good recovery from his wound; and was on his way back to his ship in order to return to England. Unhappily he contracted small-pox from which he died at Cawnpore on 27th April. Before his death, however, he knew that he had won the red ribbon of the Bath, which was a reward almost unique for an officer of his rank. Lieutenant Vaughan was promoted to the rank of commander, with the promise of additional promotion after another year's service.

We had not long been at peace with China, when it was necessary to apply coercive measures to her neighbour, Japan. That country was visited by English traders as early as 1612, although Portuguese voyagers were there nearly a century earlier. In the seventeenth century the Japanese took alarm at European influence, and rigorously closed their country to all foreigners for quite 200 years. 1853, thanks to American enterprise, the Japanese again opened their shores to foreign trade, but they did not evince any particular liking for the foreign traders all the same. A violent outrage having been committed on British subjects in the territories of the Prince of Satsuma, a British fleet, under Admiral Kuper, was ordered to proceed to Kagosima in 1862. Satisfaction being refused, the harbour and fortress were bombarded from a distance of 2000 yards, during a fierce squall that developed into a typhoon. The admiral was forced to haul off until the next day, when he renewed the attack. By evening the batteries were completely destroyed and the prince's palace and a portion of the town were in flames-and Satsuma, if he disliked the foreigner no less, at least respected him more.

In the year following, Sir Augustus Kuper (rewarded with a K.C.B. for the previous operation) arrived at Simonoseki, where the Prince of Nagato was refusing to allow foreign vessels to pass

through the straits. In this expedition France, Holland and the United States joined, each adding a small force to serve under the British admiral. When the outer batteries had been silenced, Sir Augustus landed a naval brigade of seamen and marines, and the batteries were captured and their guns destroyed. The next morning the prince sued for peace. He agreed to throw open the straits to all nations and to pay a heavy indemnity for his opposition. Since that time Japan has become one of the wonders of the modern world, having seized with eager hands upon everything that Western civilisation could offer her. She has risen into a great world power, as shown in the Russo-Japanese war of 1904-5, in which the little people fought with the Colossus of the North for their existence, and came out of the struggle triumphant.

CHAPTER XXIII

EVOLUTION OF THE IRONCLAD

The age of the ironclad began with the Crimean War. Our vaunted wooden walls were proved to be unable to withstand the destructiveness of modern shell fire, and hence the armoured vessels, which the French put into service in the closing stages of the bombardment of Sebastopol. In actual practice they showed that they were able to cope better with the great improvements in ordnance; they could approach nearer to a hostile fort; and while they delivered a terribly effective fire, they suffered but trifling damage in return. Thus, while our Navy was in the transition stage from sail to steam, warships were to undergo another equally great revolution.

France set the example in 1857, when M. Dupuy de Lome, Chief Constructor to the French Navy, set about the building of a real ironclad, as distinguished from the four armoured gun rafts that had been employed at Sebastopol. It was only natural that the first armoured vessel should be a wooden structure, and, indeed, she was the "Napoleon," a fine screw two-decker, cut down and lengthened by 24 feet. Her sides were covered with plates of iron, $4\frac{1}{2}$ inches thick, and behind the plates was the wooden framing of 26-inch thickness. The task of transformation occupied two years, and upon completion the historical new departure was re-named "La Gloire."

The French experiment at first was viewed by the British Admiralty with indifference. It was not the first time in the history of shipbuilding that France had led, and often she had built fine new ships on improved lines, only for us to snatch them from her and add them to our own Navy. There was no prospect of "La Gloire" coming our way in that manner, so the British government decided to take up the challenge and build an ironclad for ourselves; but our product was to differ very materially from the one over the Channel, in that she was to be built entirely of iron instead of wood.

Iron ships had passed the novelty stage in the mercantile marine. An iron ship, the "Vulcan," had appeared as early as 1818, and in passing, it may be remarked that she was knocking about, carrying

coal, as late as 1875. For some years, however, the shipbuilder did not take kindly to iron. It was not until the year 1834 that his eyes were opened, when the "Garry Owen," another iron vessel, 125 feet in length, went ashore in a storm between Limerick and Kilrush. At the same time not a few wooden ships were piled up in various places; and whereas most of them became total wrecks, the "Garry Owen" was got off, apparently little the worse for the experience.

Within but a very few years iron ships were ousting wooden ones in the mercantile marine, while they were taboo in the Navy. The East India Company had built an iron armed paddle-steamer, the "Nimrod," in 1839. In 1846 was completed the "Birkenhead," 1400 tons, an iron paddle-steamer designed as a transport; but as she sank off Simon's Bay with a loss of 450 souls, her fate did not fill the builder with sinful pride, nor inspire confidence in the

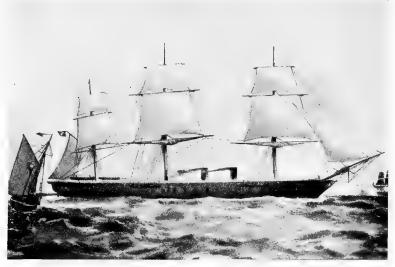
production of similar vessels.

The substitution of iron for wood in mercantile ships needed no great advocacy, for although bulk for bulk iron is heavier than wood, a less quantity of the former will afford equal strength. To withstand the strain of ocean voyaging, a wooden ship had to be of enormous thickness, while a comparatively thin hull of iron is as strong, and at the same time lighter, more buoyant, and of less displacement. But for warships thin iron plates could not withstand cast-iron round shot. More than that, when a shot shattered the iron plate, the flying pieces were at least as dangerous as the shot itself. Experiments, however, had shown that wroughtiron plates, $4\frac{1}{2}$ -inch thick, would withstand a shot of 68 pounds, which at that time was the heaviest projectile.

If Dupuy de Lome, in producing the "La Gloire," had gone groping into the unknown, the designers of our first ironclad were no better off, since the order was given in 1859, before the French vessel was launched. In addition to her 4½-inch plates, it was known that "La Gloire" was to have ports 81 feet apart and 5 or 6 feet above the water; she was to rely almost wholly upon steam; her speed was to be 9 knots per hour; and her armament would comprise thirty-four 54-pounders and a couple of shell guns. The British designers were to plate their ship somewhat similarly to our rival's; but the speed was to be 14 knots; and the vessel was to provide comfortable space for her crew, and be able to carry provisions for four months. All the best naval architects of the day sent in plans and finally the design of Sir Isaac Watts, the Chief Constructor to the Navy, and Mr Scott Russell, the great naval architect, was adopted; and the work of construction commenced at the Thames Iron Works.

Our first ironclad was named the "Warrior" and cost £376,000, a sum which affrighted the British taxpayer of that day. But there was no doubt that for his money he had got a tip-top fighting

weapon, and incidentally the most interesting ship in the world. Her proportions were considered enormous. She had a length of 380 feet; beam, 58 feet; depth, 26 feet; burden, 8830 tons. Gloomy croakers had foretold that the weight of the ship's armour would sink or upset her. Whereas, while she was 3000 tons more than our largest wooden screw 3-decker, she drew two feet less of water than some of the wooden warships. The $4\frac{1}{2}$ -inch thick armour consisted of plates 12 to 15 feet long by 3 feet broad and, as the edges of the plates fitted into each other, the whole mass was practically a single piece. Between the armour plates and the iron hull was a covering of teak 18 inches thick. The total thickness of the



H.M.S "WARRIOR," 1860.

protection thus was $22\frac{1}{2}$ inches, and as no existing gun could penetrate it, even at a range of only 200 yards, the "Warrior" could claim to be invulnerable. The armour did not extend to the whole length of the ship, being only 212 feet long, but covering all the vital parts, except the steering gear. But to minimise possible injury from shot and shell that might enter by way of the bow and stern, the ends of the ship were built up into plated compartments. This new ironclad was really an iron frigate with a full sail equipment, and a main armament of thirty-eight 68-pounders, eighteen on either side of the main deck; but as the vessel was not plated from end to end, five guns on each broadside were not behind armour. The guns were smooth bores, but they were afterwards changed to rifled ordnance. The propelling

machinery gave a speed of 14 knots, which was a knot and a half faster than the speediest wooden frigate, but it must be confessed that the length and fine lines of the vessel caused her to be not very handy and manageable, which led to shorter ships being built. It should be added that the vessel had a ram bow, the chief projection being at or about the water-line.

The "Warrior" has been described at considerable length, because she represents the dividing line between the old and the new. and from her really dates our modern navy. Space will not allow anything like full details of the new ships that followed in rapid succession, but by selecting those in which were embodied the improvements suggested by experience, or new ideas that demanded practical tests, we shall be able to gain a good conception of the activities of the naval shipbuilder. Within six or seven years of the appearance of the "Warrior," ten broadside ironclads were added to the Navy; of which only those showing some marked feature need be mentioned by name. The vessel to follow the "Warrior" was the "Black Prince," which was 380 feet long, with a burden of 9210 tons. She was full rigged, but was not fitted with a ram. Her armour was 4½ inches thick, but the plating did not cover the whole length of the vessel, there being quite 40 feet at each end without protection. So far the "Black Prince" resembled her predecessor. But really the armour was continued within the vessel, for the ends of the armoured belts were connected by ironplated bulkheads. This innovation did not afford any protection to the steering gear, but it made a complete armoured box battery for the greater part of the gun-deck. The armament of the vessel consisted of four 9-ton and twenty $6\frac{1}{2}$ -ton guns, all muzzle-loaders. Another notable improvement in this ship was the provision of a number of watertight compartments; these added to the safety of the ship if pierced by the enemy's shot, and at the same time afforded a certain amount of extra buoyancy.

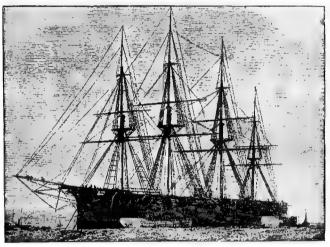
The "Bellerophon" was laid down in 1863 at Chatham, but was not completed until 1866. She was designed by Sir Edward Reid, and contained several special features of improved construction. As guns were increasing in size and penetrative power, this new ship was built 80 feet shorter than the "Warrior" and she was provided with a short central battery carrying a smaller number of the heaviest existing weapons. She measured 300 feet long by 56 feet beam and displaced 7550 tons; speed 14 knots. Her armour consisted of a wrought-iron belt, extending throughout the ship's length from 5 feet below the water-line to 15 feet above it; while amidships the armour was carried up higher to afford shelter for all the guns. Her main armament consisted of ten 12-ton 9-inch muzzle-loading guns, throwing a shell of 253 lbs., capable of piercing 10 inches of armour at 1000 yards. One very important feature of the "Bellerophon" was her complete double bottom, which not





only gave additional longitudinal strength, but much increased the ship's chance of safety in case the bottom was fractured by accident. A few years later the utility of the double bottom was tested very practically on the China Station, where the "Iron Duke" ran aground on a rocky shallow. Although her outer skin was crumpled up for a considerable length, the inner skin remained intact, and the ship was got off safely and docked for repairs. The cellular double bottom in later days was improved and extended to such a degree, that the modern battleship in reality is two ships, one within the other.

Some particularly good broadside ironclads appeared during



H.M.S. "ACHILLES," 1864

the next three years, of which the most notable were the "Achilles," "Agincourt," "Minotaur," and "Northumberland." The last-named was completed in 1868. Her armour of 5½-inch thickness extended throughout the entire length of the vessel, so that not only were her ends and steering gear protected, but the fore and after guns were behind armour too. As the necessity of sail was still adhered to, there was presented the strange sight of a 5-masted ship with funnels; but afterwards she was altered to a 3-master. Her dimensions were: length, 400 feet; breadth, 59 feet; draught, 27½ feet; displacement, 10,780 tons. At first the guns comprised four 12-ton muzzle-loading rifled guns and twenty-two 9-ton 8-inch muzzle-loading rifles on the main deck; and on the upper deck were two 6½-ton 7-inch breech-loading rifled guns. The engines of the "Northumberland" and her sister ships were a great improvement upon any hitherto installed in warships; they had two cylinders

each II2 inches in diameter by 52-inch stroke, and ten boilers, each with four furnaces, supplied steam at 25-lb. working pressure, which gave a speed of I4 knots. The "Northumberland" was one of the first ships in the Navy to be fitted with steam steering gear.

While we had been building broadside ironclads, another method of carrying heavy guns at sea was being strongly urged upon the Admiralty. Captain Cowper Coles advocated the use of guns on turn-tables, and later he suggested that heavy guns be placed within revolving turrets. The idea appeared to take us back to the war-galleys of the sixteenth century, when the guns had to be fought from towers fore and aft, simply because the broadsides were occupied by the rowers, and the elevated poop and forecastle in later days were but a development of the galley towers. But Cowper Coles' plan went much further. His turrets would be placed more amidships, and being able to command a fire on both sides they could do double the work of guns on the broadside. Originally it was proposed to have several turrets, but the increasing weight of ordnance afterwards restricted the number to two, each turret containing the biggest guns that ordnance makers had yet produced. In response to Captain Coles' solicitations, the Admiralty in 1861 cut down the "Royal Sovereign," a 131-gun line-of-battle ship. She carried three masts, but was devoid of sails or yards. She was plated with armour; and four armoured revolving turrets were placed on the upper deck in the middle line of the ship. Her 12-ton muzzle-loading guns were five in number, two in the foremost turret and one each in the others. She was 240 feet 7 inches long; beam, 62 feet. The "Royal Sovereign" was the first of the converted vessels to be fitted with a steel deck, but it did not curve down below the waterline as did protective decks later.

This brings us to the addition of two notable vessels to the Navy, namely, the "Monarch" and "Captain." The first-named was full-rigged, double-turreted, with a displacement of 8320 tons, and a speed of about 14 knots. Her armour plates were of 7-inch thickness, but the turrets were encased in 10-inch armour. Her main armament consisted of four 25-ton 10-inch muzzle-loaders, but she had a secondary armament of lighter guns under the raised

poop and forecastle.

The "Captain," in many respects a sister ship, was built to the design of Captain Coles, who also superintended her construction. She was the first large twin-screw in the Navy, and carried three masts. Her length was 320 feet; beam, 53 feet; displacement, 6950 tons; speed, 13 knots. Her armour was 8 inches thick by the side of the turrets, and 7 inches elsewhere, the armour being carried down 5 feet below the water-line. In addition, she had throughout a 12-inch backing of teak, as well as two inner skins of iron, each \(\frac{3}{4}\)-inch thick. Her heaviest guns were four 25-ton rifled muzzle-loaders. In many respects the "Captain" appeared to be beyond all criticism.

She was strongly plated, powerfully armed, was capable of good speed, for in addition to her really powerful engines, she possessed extensive sail power. Owing to some error in the calculations the free-board of the vessel was only 6 feet 8 inches, whereas it was designed to be 8 feet 6 inches. Under a large spread of canvas some of the critics doubted her stability; but as in two cruises she answered all expectations, she rapidly gained a high reputation. The critics, however, proved to be correct, for, during the night between 6th and 7th September 1870, the vessel capsized in a heavy squall off



THE FOUNDERING OF THE " CAPTAIN '

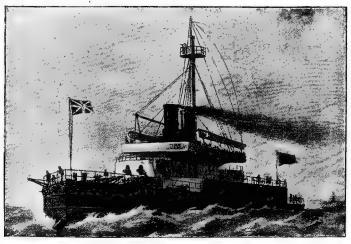
Cape Finisterre, and only 19 men were saved out of her crew of 500. Captain Coles, the inventor of the turret system, was among the lost. This disaster undoubtedly was owing to her low free-board, lack of buoyancy, and small margin of stability, that allowed her to roll beyond the point of recovery; but, nevertheless, the unexpected end of the "Captain" was no reflection on the turret system, for the high free-board turreted "Monarch" was a distinct success.

In 1869 we had launched the "Glatton," a single turret ship of low free-board, as she was not intended for sea-going beyond that necessary for coast defence. She measured 245 feet in length by 54 feet in width. Normally her draught was 19 feet and her free-

board 3 feet. She was, however, fitted with water ballast tanks. which, when filled, immersed the vessel another foot, and increased her displacement from 4865 to 5179 tons. With a free-board thus reduced to 2 feet, the "Glatton" presented but a small mark for an enemy's fire. She was very heavily armoured. Below the waterline the plating was 8 inches thick, with a teak backing of 10 inches: above it, the armour was of 12-inch thickness, backed by 20 inches of teak. Her single revolving turret, which was placed forward. was covered with 14-inch armour; it rose to a height of 13 feet above the deck, and in it were two 25-ton guns, throwing a shot of 600 lbs. The turret was protected by a breastwork 6 feet high, and built up of armour plate 12 inches thick, with a backing of 18 inches of teak. The deck was armoured with plates 3 inches thick, and this vessel was one of the first to be built with a protective deck. While she carried no sails, she retained one mast with a light yard, but only for signalling purposes. Her speed was 91 knots. She carried only 500 tons of coal, which was quite sufficient for her work of harbour and coast defence.

Attention was forcibly drawn to the turret principle in the American Civil War of 1860, and particularly the doings of the "Merrimac" and "Monitor," of which the reader can find particulars in many books of more general scope than our present volume. Our "Royal Sovereign" may be accepted as an experimental reply to the American monitors. This was emphasized further in 1871 in the "Glatton," that in its turn was the forerunner of the "Devastation," which, when she appeared, was the most powerful warship in the world. This mastless, double-turreted fighting machine was a sea-going ship. Possessing no hurricane deck, poop or forecastle, she was free of top-hamper. She was of 9500 tons burden, which was extra large for a turret ship. The turrets were placed fore and aft in the centre of the ship, each one containing two 35-ton guns, using a charge of 200 lbs. of powder and hurling a projectile of 800 lbs. The walls of the turrets were a shade under 32 inches in thickness, and were composed of alternate layers of iron and teak. In this vessel, sail power being totally abandoned, risk of breakdown was guarded against by the use of twin-screws with duplicate machinery. The propellers were 17½ feet in diameter, and each was four-bladed. She was armoured with rolled plate of 12-inch thickness, which was superior in resistance to any armour hitherto employed, e.g. the 12-inch of this rolled plate was equivalent to 30 inches of hammered plate which clothed the "Warrior." The "Devastation" was the first warship to possess a built-up keel of steel. From her bows projected a formidable ram, that would prove tremendously effective when the vessel was at her full speed of 13.8 knots. Other capital vessels of the "Devastation" type were the "Thunderer" and "Dreadnought." The last-named was fitted with compound engines that gave her a speed of 13 knots, with a less consumption of coal. Her main armament was four 38-ton guns. She was also fitted with two torpedo tubes (for torpedoes and torpedo craft see pp. 578).

Following the introduction of the ironclad there had been in progress a duel between the armour plate maker and the gunmaker. When he was faced with 4½-inch hammered plate instead of a wooden wall, the gunmaker produced rifled ordnance that treated the metal jacket as if it had been cardboard. The shipbuilder increased the thickness of his armour to 12 inches, and for a time the gunmaker was beaten. Shortly, however, new guns with more penetrative projectiles called for improved protection, which the



H.M.S. 'THUNDERER," 1877

shipbuilder met by increasing the thickness of the armour to as much as 24 inches.

Omitting reference to various intervening vessels, we come to the "Alexandra," 9490 tons, an armoured, broadside masted ship which was completed in 1877. Although she had a central battery, she could fire two 25-ton guns and two 18-ton guns right ahead and two 18-ton guns right astern; and four to six guns could be fired on either broadside. She was the first big vessel in the British Navy to be installed with compound engines, an independent set driving each of her twin screws, and giving her a speed of 14 knots. Her total cost was £900,000. Many of the early ironclads were sold or converted into depot ships. The "Northumberland," for example, was renamed the "Acheron," and was employed as a depot for second-class stokers at Chatham. At a later stage she was stripped of all interior fittings, for service as a coal hulk.

The "Téméraire" was a distinct type of turret ship, launched in 1876. She was a combination of the central battery and barbettes or turrets. We have been dealing in past pages with the revolving turrets, but the barbette tower is a stationary turret. with the upper half removed and the guns point over the top instead of through ports. In this case each tower was armed with a 25-ton gun, revolving on a turn-table worked hydraulically. The gun was borne on a disappearing carriage, the recoil from the discharge causing it to sink back into the turret to be reloaded. The two turrets were placed, one near the bow, the other near the stern; they were raised some 6 feet over the deck, and measured 33 feet by 21 feet. The armour of the fore turret was 10 inches thick; the rear turret, 8 inches. The "Téméraire's" armour belt was from 8 to II inches thick on her sides, and was carried down to below the ram. Another vessel worth mentioning was the "Superb," which may be described as a smaller "Alexandra." She was built in this country for the Turkish Government, but was bought by the Admiralty for our own service. Her armament comprised sixteen 10-inch muzzle-loading rifle guns, and six 4-inch breech-loaders.

The "Inflexible," which was launched at Portsmouth in 1876 and completed in 1881, was a very fine turret ship indeed, and in not a few respects might be accounted as the first ship of the modern British Navy. There is no gainsaying the claim that she was the finest warship put into service by any Power up to that time, and, therefore, she must be described in somewhat fuller detail. Her dimensions were: length, 320 feet; beam, 75 feet; depth, 25.3 feet; displacement, 11,800 tons. Her twin screws were driven by separate engines, each developing 4000 horse-power, or 8000 h.p. in all. Twelve oval boilers, with 36 furnaces, supplied steam at a pressure of 60 lbs., which afforded a speed of 13 knots, although upon occasion she attained nearly 15 knots. The hull was so constructed as to provide 135 watertight compartments. Each engine was entirely separated from the other by a longitudinal bulkhead. A notable deviation from the general rule was the position of the two turrets, which were built en échelon, or diagonally across the citadel in the central part of the ship. In each of the turrets were two 80-ton guns, capable of throwing a 1750-lb. projectile a distance of 6½ miles, which gives some idea of the capabilities of rifled ordnance compared to the old smooth bore. By the diagonal arrangement of the turrets, the four enormous guns could fire at once, either directly ahead or astern, the upper works of the ship being cut away to permit this to be done. The whole armament comprised the four 16-inch guns in the turrets, and eight 4-inch breech-loaders, 21 smaller guns for repelling torpedo boats, and 4 torpedo tubes. She cost fg00,000 and was sold in 1903 for \$20,000.

H.M.S. "INFLEXIBLE," 1881

The greatest problem of the battle-ship builder was how to meet the extraordinary penetrative power of the ordnance that was now available, and yet be able to keep the sea in all weathers. In the case of the "Inflexible" the problem was solved by concentrating the armour round the central part of the ship, the engines, boilers, guns, etc., being protected by 24 inches of iron, consisting of two plates each 12 inches thick. But the weight of the armour over the most vital parts of the vessel necessitated reduction elsewhere, and thus there was a reversion to unguarded ends, in which even a portion of the water-line was liable to penetration by even comparatively small projectiles.

The designer of the "Inflexible" thus summed up the chief points of excellence of his work. "Imagine a floating castle, 110 feet long and 75 feet wide, and having above that again two round turrets, planted diagonally at its opposite corners. Imagine this castle and its turrets to be heavily plated with armour, and that each turret has two guns of about 80 tons each. Conceive these guns to be capable of firing, all four together, at an enemy ahead, astern, or on either beam, and in pairs towards every point of the compass. Attached to this rectangular armoured castle, but completely submerged, every part being 6-7 feet under water, there is a hull of ordinary form with a powerful ram bow, with twin screws and a submerged rudder and helm. This compound structure is the fighting portion of the ship. . . . The step in advance has, therefore, been from 14 inches of armour to 24 inches; from 35-ton guns to 80-tons; from two guns ahead to four guns ahead; and from a height of 10 feet for working the anchors to 20 feet. And this done without an increase in cost, and with a reduction of nearly 3 feet in draught of water. My belief is, that in the 'Inflexible' we have reached the extreme limit in thickness of armour for sea-going vessels."

Concerning the limit in thickness of armour the designer was correct, for the compound armour such as was employed on the turrets was shortly to be used on the sides of the ships. Our advisers had considered hard steel to be too brittle to repel the thunderous blows of the newest projectiles, and consequently we adopted the compound system, while France was relying wholly on steel. When the United States came out with nickel steel of increased toughness, the shipbuilder's problem became easier, and when the wonderful Harvey and Krupp steel appeared the difficulty was conquered to all practical purposes. This, however, is rather looking too far ahead at the moment. It will be sufficient to note that from this time onwards instead of armour plate increasing, it decreased in thickness, for it was an accomplished fact that 14 inches of solid wrought-iron armour offered less resistance to projectiles than 7 inches of nickel steel.

The "Ajax" and "Agamemnon," that shortly appeared, may

be considered as smaller "Inflexibles"; but the "Colossus" and "Edinburgh," that were begun in 1882 and completed in 1886, marked another era in our warships. Not only were they built of steel, but their guns were breech-loaders, Great Britain being the last of the great Powers to realise the inferiority of the muzzleloader. Probably the bursting of a 38-ton muzzle-loader on board the "Thunderer" in 1879 led the Admiralty to inquire into the advantages of the breech-loaders, which, with less weight, yielded at least equal results, and generally far better. One of the old 80-ton muzzle-loaders, for example, with its 1700-lb. projectile, had a muzzle velocity of 1540 foot seconds, and would pierce 24 inches of wrought iron at the muzzle; but a 46-ton breech-loader would throw a projectile of 850 lbs. at a muzzle velocity of 2400 foot seconds, piercing 38½ inches of wrought iron at the muzzle. In any case the "Inflexible," "Ajax," and "Agamemnon" were the last warships to be equipped with muzzle-loading guns.

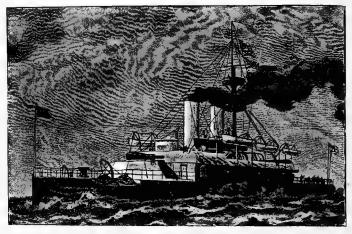
In the matter of building with steel we had progressed slowly too. In the first place the metal was restricted in supply, and, while it was expensive, it had not reached its present-day excellence. At first we used it in conjunction with iron; one vessel having a steel deck, another a steel keel; in one case it would be used for facing armour, and in another would be employed for the frames, Gradually the advantages of steel were proved to be overwhelming. The "Inflexible's" propeller shafts were of compressed steel and weighed 63 tons, as against 97 tons if wrought iron had been used. In proportion to its weight steel is much stronger than iron, and in a steel warship there was a great saving in the weight of the hull; and the weight thus gained allowed of heavier armour or bigger guns, or a combination of those desirable qualities. The employment of steel meant bigger vessels, with more boiler power, giving increased speed; a greater extent of stronger armour; and more effective guns, for the decrease in the weight of the nonfighting part of the ship would allow of a secondary destructive armament.

In 1882 we commenced building what were known as the "Admiral" class, of which the first was the "Collingwood," launched in 1886. In size and shape she much resembled the "Colossus," but she was faster (16.8 knots), and there were notable differences in her armour and guns. The "Colossus" was a turretcitadel battle-ship, whereas the "Collingwood" was a barbette and central-battery ship. The main armament consisted of two pairs of 45-ton guns, each pair mounted en barbette at the fore and after portions of the ship. Other vessels of this class were the "Howe," "Rodney," "Anson," "Camperdown," and "Benbow." These five were all a little larger than the "Collingwood," but all were under 11,000 tons; and all of them steamed at practically 17 knots. While the main weapons of the "Collingwood" were four 45-ton

guns, four of the vessels carried four 67-ton guns, and in the case of the "Benbow" a greater departure was made, for, instead of four big guns as in the case of her sisters, she was equipped with a

couple of 110-ton guns, one at each end.

With their speed capabilities and their offensive powers, the "Admiral" class were more nearly the forerunners of the present type of first-class battleship than any ships that had preceded them. While the "Admirals" displayed many of the solid advantages consequent upon the employment of steel in their building, they were very keenly criticised. The chief defect lay in their armour. The side armour of the "Collingwood" was 18 inches thick, that of the bulkheads 16 inches, and the barbettes 11½



H.M.S. "COLLINGWOOD," 1886

inches. The quality of the armour had been improved to some extent by giving the wrought-iron plate a hardened surface; but while the most vital parts were armoured with a considerable thickness of metal, the greater portion of the hull, including the ends, was left without protection. In face of the highly improved explosive shells, and the increasing size of quick-firing guns, half-armoured vessels certainly appeared to be an anomaly. It was claimed that the unarmoured portions of battleships might be shot away, but the fighting central part would still float, owing to the watertight compartments, and the watertight cells in the double bottoms. Nevertheless, even before all the "Admirals" were completed, two more battleships, the "Nile" and "Trafalgar," were under construction.

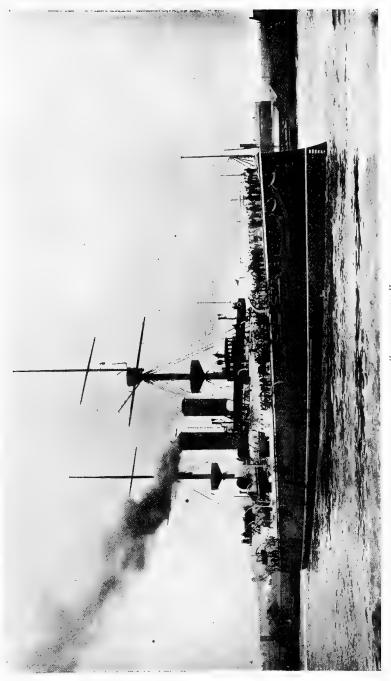
The "Nile" and "Trafalgar" might be described as improvements upon the "Devastation," and it should be noted that the last-



named had given very considerable satisfaction. At the waterline their armour was 230 feet long, leaving a smaller portion unarmoured than in the case of the "Admiral" class, but in atonement for the unprotected ends, the armour, instead of being carried up only 3 feet above the surface of the water, was extended to the upper deck; the armour belt varied from 14-20 inches in thickness. There were two turrets, fore and aft, each armed with two 67-ton guns. Between the turrets was an armoured central battery, carrying eight 40-pounder quick-firing guns; on the spar deck were twelve 6-pounder quick-firers; and there was a mast with a "fighting top," which carried a couple of quick-firing 6-pounders. Like all vessels since 1868, they were twin-screws; displacement, 11,940 tons; speed, 17 knots. Although in many respects these two ironclads seemed almost the last word in naval construction, they had a low free-board, and were among the last such to be added to the Navy.

While the two last-named were under construction, another couple was also building, namely, the "Victoria" and "Sanspareil." We will describe the former, because of the untoward fate that befell her in 1893, to which reference is made in the succeeding chapter. She was an armoured, steel, first-class, single-turreted battle-ship, built at Newcastle-on-Tyne. Her dimensions were: length, 340 feet; beam, 70 feet; depth, 273 feet; displacement, 10,470 tons; speed, 17\frac{1}{4} knots. Her armour varied from 16 to 18 inches in thickness; but the ends of the ship were unprotected; her protective deck was 3 inches thick. She and her sister, the "Sanspareil," were the first British ironclads to be fitted with triple-expansion boilers, although they had made their mark in the merchant service some years earlier. In the single forward turret she carried two 110-ton guns; one 20-ton gun was mounted aft to fire over the stern; and she also carried twelve 6-inch guns, twelve 6-pounder quick-firers, twelve 3-pounder ditto, eight machine guns, and four torpedo tubes. The "Benbow" and the "Victoria" may be said to have inaugurated the big gun era.

The "Royal Sovereign" class, eight in number, was launched in 1891-2. They were all of the high free-board barbette type, except the "Hood," which was the last of the British turret ships. Their dimensions were 380 feet by 75 feet by 27.5 feet; displacement, 14,150 tons. They carried four 67-ton guns, and ten 6-inch guns. It will be noted that, although these vessels showed an increase of 3500 tons in displacement over the "Camperdown," the armament provided an addition of only four 6-inch guns. The extra displacement was chiefly absorbed in additional armour, which accounted for nearly one-third of the whole displacement. Additional weight allowed of more powerful machinery, which gave a speed of 17 knots. The bunker space was also greater, for not only must vessels of our fleet be able to act at great distances from a base,



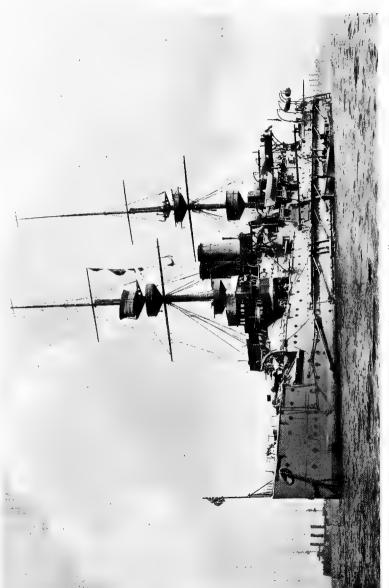
but modern systems of lighting, distillery, etc., use considerable coal daily, even when a vessel is at anchor. Although the auxiliary armament showed so little increase, there was a great change in its disposition. The guns were placed in two tiers, four in the battery and six on the upper deck above. The compound armour of 18-inch thickness extended along the water-line, sufficiently far to protect the bases of the barbettes. Some of the additional armour went in casemates for the 6-inch guns, except in the case of the "Hood," whose turrets gave her sufficient weight on the upper deck. The "Royal Sovereign" was notable for the speed with which her construction was accomplished. She was laid down in September 1889 and was launched in February 1891, a record then for rapid building of a vessel of such dimensions, and including such weighty material. Reference has been made to the "Hood"; and the names of the remainder of the class were, "Empress of India," "Ramillies," "Repulse," "Resolution," "Revenge." and " Roval Oak."

The "Renown," that was launched in 1895, had a displacement of only 12,350 tons. She was the first British warship to be armoured with Harveyised steel. This improved armour enabled us to abolish those enormously thick protective belts that had been encumbering our vessels. Although the "Renown" possessed no armour thicker than 10 inches, she was better protected than the

"Royal Sovereign," with her 18 inches of compound plate.

Nine magnificent vessels of the "Majestic" class followed the "Renown," and all of them launched by 1896, and completed by 1898. They were 10 feet longer than the "Royal Sovereigns," with an additional displacement of 750 tons. These vessels were the most powerful warships afloat, fully justifying the titles "Majestic" and "Magnificent," which were given to the first couple, the remainder of the batch being the "Cæsar," "Hannibal," "Illustrious," "Jupiter," "Mars," "Prince George," and "Victorious." Their armament was marked by a considerable increase of guns on the broadside. At each end was a pair of 12-inch 46-ton wire guns, mounted en barbette, with steel shields, o inches thick, protecting the breach; the 6-inch quick-firers were twelve in number, and the supplementary armament consisted of eight 12-pounders on each side. The four 12-inch guns being able to fire on either side, we thus got a broadside fire of eighteen guns. The 12-inch guns now developed an energy nearly equal to the 67-ton gun, while the penetrative power was in excess of the 110-ton gun.

The next class to appear consisted of the "Albion," "Canopus," "Goliath," "Ocean," "Glory," and "Vengeance," all launched by 1899, but the batch not finally completed until 1902. Their displacement was 12,950 tons, otherwise their dimensions were roughly the same as in the "Majestic's"; but their speed was 18.25 knots. These vessels mounted four 12-inch and twelve 6-inch guns. In



H.M.S. " MAGNIFICENT"

order to save weight, to allow of additional armament, the armour at the water-line was reduced to 6 inches, which led to some criticism

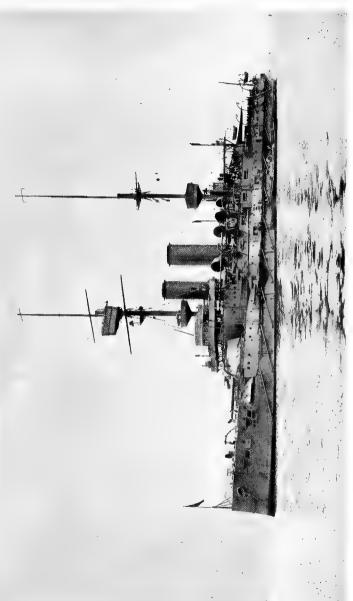
in view of modern gun-power.

In 1898 we commenced launching eight vessels of the "Formidable" class, the others being the "Bulwark," "Implacable," "Irresistible," "London," "Prince of Wales," "Queen," and "Venerable." Although none of these vessels were completed earlier than 1901, and the last of them in 1904, they rightly belong to the nineteenth century. They attracted more than usual popular attention, if only because they were the first of our warships to cost a round million sterling each. They were the biggest vessels yet built, being 400 feet in length, and the displacement 15,000 tons. They all developed a speed of 18 knots. Their armament was practically the same as in the "Majestic" class. This class brings us to the end of the nineteenth century; and the further development of our ironclad battleships must be left until we consider the

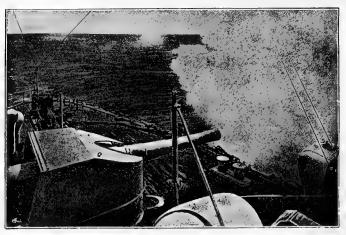
Twentieth Century Fleet.

Although battleships are the ultimate measurement of the naval power of a nation, it must also possess lighter vessels, and especially cruisers, the present-day representative of the frigate. Cruisers are the eyes of the fleet, their chief duty being to find the enemy and keep in touch until the main body can come up. do this they must be of sufficient speed to avoid capture themselves. Strangely enough, in the period when we were exchanging sail for steam, our cruisers were developing less speed than the battle-ships. It is a fact that, if we had been engaged in war at that time, battleships would have had to be detached to act as scouts, while the real cruisers dared not go out to sea for fear of capture. It was not until 1890 that we tackled the cruiser problem seriously, and replaced our steam and sailing frigates of from 4500 to 5500 tons with the "Crescent" class of 7700 tons. These were followed by the "Blake" and "Blenheim" of 9000 tons. The defence of these vessels consisted only of a protective deck; while the armament was a 22-ton gun for the bow and stern chaser, with ten 6-inch guns on the broadside. In 1893 appeared the "Edgar" class, of which seven ships were built. They were of 7350 tons, and as they were intended chiefly for service on foreign stations, where docks are separated by long distances, they were given a sheathing of wood and copper. These vessels had a protective deck similar to that of the "Blake." The main armament was a 6-inch gun at bow and stern, and eight 4.7-inch guns on either broadside; these last were afterwards changed to ten 6-inch quick-firers.

Two very notable cruisers were launched in 1895, namely, the "Powerful" and "Terrible." To keep the sea for any length of time and travelling at a great speed necessitated the cruiser going up enormously in size, and thus the new vessels were 500 feet by

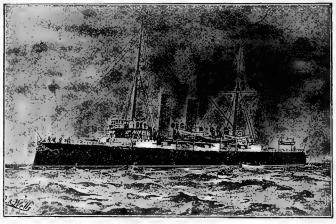


71 feet by 29 feet, with a displacement of 14,200 tons and a speed of 22 knots. Carrying 2600 tons of coal, these vessels could cross the Atlantic, for example, quicker than most big liners, even



H.M.S. "BLENHEIM" FIRING THE AFTER 22-TON GUN

although the latter are free from the great weight of armour and guns. The "Powerful" and "Terrible" were armed with a

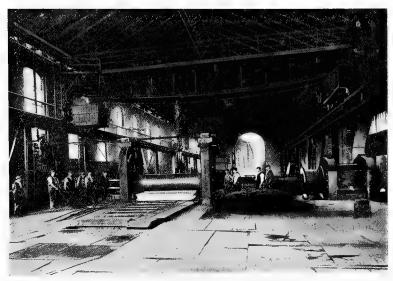


H.M.S. "EDGAR," 1890

22-ton gun at each end, together with sixteen 6-inch guns, sixteen 12-pounders, and some smaller weapons. A stout steel deck within the hull provided protection for the machinery and vital parts.

These two cruisers made great names for themselves on account of the part their men played in the South African War. During the next two years we launched the "Diadem" class of 11,000 tons. There were eight of these vessels with a protective deck, as in the "Powerful" and "Terrible." Many experts looked upon them with disfavour, not only because they considered them insufficiently protected, but also because they carried nothing heavier than 6-inch guns.

About thirty years ago we had built armoured cruisers such as the "Imperieuse" and "Warspite" of 8400 tons, armed with



ROLLING AN ARMOUR PLATE

9.2-inch and 6-inch guns. Ten inches of compound armour protected some portions of their hulls at the water-line. These were followed by a series of seven-belted cruisers of smaller dimensions and less guns, and with a speed of 17 knots. But in 1899 we launched the "Cressy," the first of a new armoured class. Six in number, these vessels were of 12,000 tons, and attaining a speed of about 21 knots. Their dimensions were 440 feet by 69.5 feet by 26.25 feet. The armament comprised two 9.2-inch guns in armoured barbettes, one fore and one aft; twelve 6-inch guns in casemates; fourteen 12-pounder quick-firers, and several smaller guns. These vessels were provided with armour in addition to the protective deck, having a 6-inch belt of Krupp steel carried forward to the stem, but not aft to the end of the stern. All the gun positions were protected by 6 inches of armour, and the secondary battery by

5-inch casemates. Athwartships, fore and aft, were 5-inch armoured bulkheads, that in a battleship would thus form the central battery. These vessels were calculated to be able to overhaul and bring to action most foreign cruisers; but as some new cruisers were appearing abroad of greater speed and power, we promptly commenced to make improvements on the "Cressy" class.

The end of the nineteenth century found us with a fleet utterly unlike the one which had served us so gloriously at its commencement. The wooden walls had been swept off the face of the waters. A single modern battleship could have engaged the whole of the fifty ships-of-the-line engaged at the battle of Trafalgar; she could have sunk every one at her leisure, and could have retired from her work of annihilation practically as intact as when she commenced

her task.

In concluding this chapter we may glance at our shipbuilding resources. The chief Government yards are at Portsmouth, Devonport, Chatham, and Pembroke; but there are no less than eight private firms capable of turning out Dreadnoughts, viz.: Messrs Armstrong, Whitworth & Co. (Newcastle); Messrs Vickers (Barrow); Palmer's Shipbuilding and Iron Co. (Jarrow); Messrs Cammell, Laird & Co. (Birkenhead); Messrs Beardmore & Co. (Dalmuir); Fairfield Shipbuilding and Engineering Co. (Govan); Messrs John Brown & Co. (Clydebank), and Messrs Scott's Shipbuilding and Engineering Co. (Greenock). Naturally, with facilities for building the largest vessels, they can also cater for the smaller types. Torpedo craft are built largely by Messrs Thornycroft & Co. (Woolston); Messrs White & Co. (East Cowes); Messrs Hawthorn, Leslie & Co. (Newcastle); Messrs Swan, Hunter & Co. (Wallsend). Our first ironclad, the "Warrior," was built at the Thames Ironworks, which famous firm continued to build fine vessels up to H.M.S. "Thunderer" of 1912, when the competition of northern firms, more favourably situated near the coal and iron centres, caused the Thames vard to be closed down.

CHAPTER XXIV

SAFEGUARDING THE EMPIRE

AFTER the war with Russia in the middle of the last century, the British Fleet was not called upon to engage in any great operations until August 1914, but the safeguarding and extension of our Empire involved us in a variety of campaigns in which our naval

men were occupied chiefly on shore.

In 1845 the Maori braves of New Zealand commenced giving us trouble, which was settled by peace in the following year. In the early part of 1860 the first Taranaki War broke out. In May 1861 a peace was patched up, which lasted for almost exactly two years, when the Waikatos broke out, and committed a series of murders that led to fresh hostilities. In an attack on the pah, or fort, at Rangiriri, we employed a force of 1300 men, of whom 200 were sailors; and four gunboats also took part in the operations. The walls of the pah were 20 feet high, fronted by a ditch 9 feet in width. The troops and sailors made several desperate assaults on the stronghold without waiting for a breach to be effected. The result was a loss of 35 men killed and 85 wounded; but on the following day the surviving Maoris laid down their arms.

At Orakau the enemy inflicted upon us a loss of 16 killed and 52 wounded; after which the natives contrived to escape, although they had suffered many casualties. At the Gate Pah, on 28th February 1864, our assaulting column, 300 strong, half of whom belonged to the 43rd Regiment, while the remainder were seamen and marines, met with such a desperate resistance, that the reserve of the naval brigade had to be rushed up to save the situation. In this engagement we lost 27 killed, 9 of them officers—among them Captain John Hamilton ("Esk"), and Commander Edward Hay ("Harrier"); the wounded numbered 66. In these various warm encounters with a brave, though barbarous foe, only a little reasonable caution would have prevented our lamentable losses, that were always out of proportion to the importance of the occasion. casualties at Rangiriri ought to have taught the necessity of first breaching the enemy's defences, or, failing that, the employment of scaling ladders and platforms for crossing the ditches. the natives could have been overcome practically without loss of

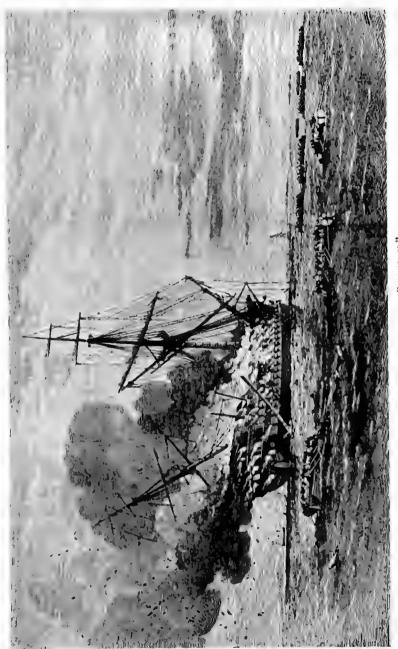
life by surrounding the various pahs and starving the defenders into submission. Shortly the Maories made a peace that has lasted, while New Zealand has been built up into one of the most prosperous of our colonial possessions.

Considering the number of ships that are always at sea, the British Navy has lost but few from misadventure. We have recorded several instances of fine vessels that foundered during storms, notably the "Association," "Victory," and "Blenheim," in which cases respectively Sir Cloudesley Shovel, Sir John Balchen, and Sir Thomas Troubridge went down with their crews. But in December 1864 the two-decker "Bombay," 84 guns, was lost from fire, the dread enemy which seamen fear more than any gale that ever blew. This vessel, the flagship of the Hon. Charles Elliot, was some twelve miles off Monte Video, when smoke was perceived to be rising from the hatches nearest to the spirit-room and magazine. The crew had scarcely been rung to their stations at fire quarters, when the fire burst through the orlop deck. Although at any moment the magazine might fire and blow up the ship, the

men fought desperately to subdue the flames.

Captain Colin A. Campbell, seeing that all efforts were useless, gave directions for the order to pipe "Out boats!" First the quarter boats were lowered and the sick were passed into them; and next, the boom boats were ordered to be hoisted out, while men still manned the pumps. In eight minutes from the time of the pipe, nine boats were got out, two others being rendered useless by the fire reaching them. As the boats would not hold all of the 600 officers and men aboard, hammocks, gratings, and any articles that would assist to keep men afloat, were thrown overboard. The flames, bursting up from below, drove everybody over the side, some taking refuge on the anchors, cables, bowsprit, and ropes hanging overboard. As the boats filled, they shoved off, and then laid on their oars in order to pick up men who were in the water. When the flames attacked the masts and rigging, and the explosion of the magazine was imminent, the boats pulled away from the ship. After the lapse of only an hour after the discovery of the fire, there remained on board none but a few poor fellows, who had been suffocated by the dense smoke.

In due course Captain Campbell was tried by court-martial for the loss of his ship. He reported to the Court concerning the behaviour of his officers and men:—"The heroic conduct and steady discipline of those who remained on board the ship nobly doing their duty under the momentary expectation of an explosion of the magazine, while large shells were bursting between decks, were only equalled by the devotion displayed by many of those in the boats, who, notwithstanding the fact that some of the guns were shotted, that some of the masts were falling over the side



THE BURNING OF H.M.S. "BOMBAY"

that the whole ship was wrapped in flames, pulled in and picked off those who, unable to swim, were clinging to the ship, thus saving, by means of the ship's boats alone, 525 lives out of 619." The Court arrived at the conclusion that it was impossible to trace the origin of the fire; the captain, officers, and men were acquitted of all blame; and the attention of the Lords Commissioners of the Admiralty was drawn to the numerous examples of heroism and devotion shown by many of the officers and men.

In the West Indies, in October 1865, a nice little bit of naval history was made by Captain Charles Wake, of the paddle sloop-ofwar "Bulldog" in a gallant attempt to vindicate the honour of the British flag. A revolution was in progress in San Domingo at the time, and the sloop was cruising about for the protection of British interests. On the 18th the "Bulldog" came up with the British ship "Jamaica Packet," which was being chased and fired at by a steamer and three schooners belonging to the insurgents. Captain Wake sent his first lieutenant aboard the insurgent steamer, the "Voldrogue," to inform her captain that if the "Jamaica Packet" was entitled to fly the British flag, he could not allow any interference with her; but, on the other hand, if he found her papers were not in order, he would not afford her any support. The insurgent captain was rude and ill-tempered, and the "Voldrogue," in attempting to run alongside the "Jamaica Packet," managed to foul the "Bulldog." While the two ships were thus close together, the commander of the "Voldrogue," revolver in hand, desired to learn the result of Captain Wake's inspection of the "Jamaica Packet's " papers. The British commander refused to comply with a demand by threat, and intimated that any further offensiveness would leave him no option but to capture the "Voldrogue," whereupon the insurgent captain steamed off to rejoin the schooners.

Captain Wake at once proceeded to Cap Haytien to relate the incident to our Vice-Consul at that port, so that he might address a communication to the insurgent council concerning the right of the "Jamaica Packet" to fly our flag, and the protection it afforded her. Shortly after Wake's arrival in the harbour, the "Voldrogue" and her consorts also came to anchor. The insurgent commander at once went ashore, and his version of the affair caused his leaders to run up a red flag over the batteries, whose cannon were directed on the "Bulldog." Captain Wake sent a boat ashore, but her officer was threatened by an armed force, and ordered back to his ship. The British Consulate was entered by armed insurgents, who seized political refugees who had sought British protection. The Vice-Consul and another Englishman barely escaped with their lives, and then only by swimming off to the "Bulldog.".

Captain Wake at once demanded satisfaction from the rebel leader, General Salnave, but only to meet with contemptuous

replies, and the threat to put the British captain to death, if he attempted to go ashore. Captain Wake thereupon informed Salnave that he proposed to take the Vice-Consul to Port Acul to lay the matter before the lawful President of Hayti, and that he would return to Cap Haytien on the 23rd to vindicate the honour of the British flag, unless the insurgents were prepared to make amends by that time. Upon the day fixed the "Bulldog" returned to Cap Haytien harbour, where the red flag was still flying, and the batteries all ready for work. Further parley appearing to be useless, and his ship being already cleared for action. Captain Wake opened fire on Fort Picolet, and headed for the "Voldrogue," in order to ram and sink her. During the absence of the "Bulldog," the captain of the "Voldrogue" had altered his position, and now lay behind a sand and coral spit, of which the British captain had no knowledge. His ignorance on the point proved disastrous, for, in charging at the foe, the "Bulldog" ran hard aground on the spit, and no efforts made by the crew could move her. Captain Wake, therefore, decided to fight his ship until it was dark, and then, by lightening her, hoped to get off at high tide.

The "Bulldog's" gunners made an excellent commencement. With their first shell, a 100-pounder, they sank the "Voldrogue," and the "Bulldog's" boats were put out to save some of the enemy from drowning. Shortly another shell sank the biggest of the three rebel schooners. The remainder of the enemy's flotilla sought to escape a similar fate by sheltering around the United States ship "De Soto," which Wake did not desire to hit instead of one of the

enemy.

Having thus shown the insurgents what he could do with their ships, Captain Wake made further determined attempts to get the "Bulldog" off the spit. He shifted weights on board, started water in the tanks, laid out cables and hauled on them, and reversed engines. All these efforts being of no avail, Captain Wake requested the captain of the "De Soto" to tow him off; but the American captain would render no active assistance, although he offered to take aboard his ship any wounded men that Wake might send him.

The "Bulldog" now opened fire on the enemy's batteries, and after a short time silenced all but one, whose two guns were run quickly out and in again behind very solid masonry. By this time Captain Wake had reviewed the situation. The "Bulldog" was immovable; there was little food aboard; two-thirds of the coal had been used; and the enemy's shot had crippled three of the boats. Upon top of all, the ammunition would not last beyond the middle of the next day. In addition to that serious state of affairs, at sunset the enemy brought round some heavy guns and planted them within 500 yards of the "Bulldog," in readiness for use on the morrow.

Captain Wake was in a hopeless predicament. He considered



WITH THEIR FIRST SHELL THE "BULLDOG'S" GUNNERS SANK THE "VOLDROGUE"

the chances of landing and taking the works by storm, only to decide that his force was insufficient. Nothing could avail him except the arrival of another British warship, which was a very remote possibility. The captain decided to remove his wounded and prisoners to the "De Soto," under cover of darkness, and then blow up the "Bulldog," in order to prevent her falling into the hands of the enemy. Shortly before midnight the seamen were armed and mustered into the boats. Fires were then laid between decks and tuses were lighted leading into the magazines. Ten minutes later the sloop was destroyed. Captain Wake made for Lessionade, seven miles off, with his boats, and there obtained the use of a Haytien steamer to convey his crew to Port Acul, from whence, in another vessel, they were taken to Jamaica. To the lay mind it might appear that Captain Wake had done uncommonly well in the face of unmerited misfortune. The naval authorities thought differently. The decision of the court-martial was that he had run his ship aground negligently, and that he destroyed her prematurely. The captain was reprimanded and dismissed his ship, and several of his subordinates also suffered punishment in less severe form. The British public did not agree with this treatment of Captain Wake, who also had the profound sympathy of the greater part of the Navy. Punch devoted a cartoon to the subject, to which were appended the following lines:—

"Here's three cheers for Captain Wake, and while we sail the sea, May British bulldogs always find Captains as stout as he, That's all for biting when they bite, and none for bark or brag, And think less about court-martials than the Honour of the Flag."

In the Abyssinian expedition of 1868 the British Government could not be accused of undue haste in commencing operations. Thirteen years earlier Theodore usurped the crown of the King of Shoa, and from the outset his rule was marked by the most oppressive cruelty. Later, he developed particular animosity towards the British. One grievance against us was the non-reply to a letter, which Theodore addressed to Queen Victoria, in which the dusky potentate is said to have made an offer of marriage to our recently widowed monarch. The missive never got further than the Foreign Office, where it was put on one side and forgotten. Early in 1864 Theodore seized Captain Cameron, our consul at Massowah, and put him in chains; and a little later he treated an envoy in the same manner, and also imprisoned missionaries and other foreign residents. Apart altogether from the suffering and indignity inflicted upon the prisoners, the flouting of British power would have an adverse effect upon our subjects in India; and after negotiations, as protracted as they were unavailing, it was decided to commence hostilities against Theodore.

The rescuing of the captives promised to be difficult and costly, and incidentally it may be mentioned that the expenditure worked out at something like £9,000,000 sterling. The distance from the coast to the capital was 400 miles through mountains and almost unknown territory. Ten thousand troops, ordered from India, under Sir Robert Napier, arrived in Annesley Bay in January 1868, where also Commodore Heath, of the Bombay Marine, brought a small squadron; and Captain T. H. Fellowes of the "Dryad" organised a rocket brigade of seamen. Transport to Magdala was a difficult matter, for, in addition to the fighting force, the expedition meant the employment of 14,000 persons and over 36,000 transport animals, chiefly mules, with 44 elephants and nearly 6000 camels. The whole expedition was carried to Africa in 235 sailing ships, and nearly 100 steamers.

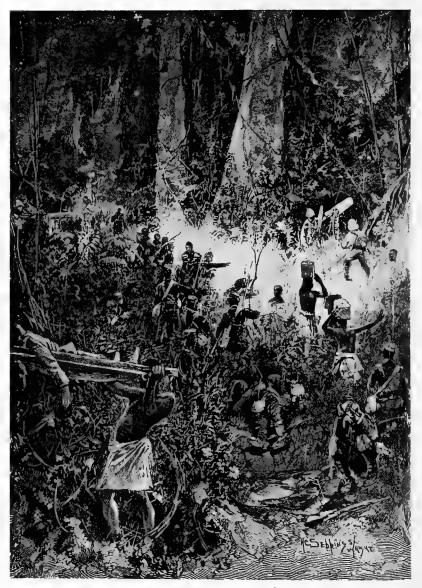
Progress was slow, but Senafé, Adigrat and Antalo were captured in succession and strong posts left in the occupation of each. At Aroghee the British force came in contact with Theodore's army of 5000 men, which had come down from the fortress of Magdala. As the Abyssinian horse and foot came to the attack, the sailors unshipped their rocket tubes from the backs of the mules. When their missiles dropped among the foe, they paused in terror, and the horses, breaking away in fright, threw the whole hostile force into the utmost confusion. The Abyssinians rallied and rushed on, but only to be met with the fire of the Snider rifles of the 4th Regiment. This was the first engagement in which British troops had used breech-loaders, and the rapidity of the fire amazed and terrified the enemy. The rocket party not only scattered the foe, but nearly killed Theodore himself, who was at the top of Fahla Hill superintending the working of the guns. In the end the Abyssinians were decisively beaten, losing 500 men killed, while our losses were only 100 wounded. It was a great score to Sir Robert Napier that he cut off the defeated force from return to Magdala. When all was lost Theodore shot himself to escape capture, the chiefs making terms for themselves that brought hostilities to an end. For his brilliant services Sir Robert was created Lord Napier of Magdala, and Commodore Heath received the ribbon of the Bath.

In West Africa we had experienced trouble with the Ashantis over a long period of years. In 1824 and 1826 small white forces, with the aid of friendly tribes, fought pitched battles with the warlike savages, who were routed on each occasion. In 1863 there were further hostilities because of our refusal to yield up slaves, who had sought our territory for protection. In January 1873 the Ashanti monarch, Koffee Kalkalli, invaded our neighbouring protectorate with 40,000 warriors, and appeared before our coast fortress of Elmina in June. Captain Fremantle, of the "Barracouta,"

sent a detachment of about 100 marines to assist Lieutenant-Colonel Festing's force of Houssas, or native police, in keeping the Ashantis at bay until regular troops could arrive from England.

In July Commodore Commerell, V.C., in the "Rattlesnake," took the naval command. He organised a body of 400 seamen and marines for service ashore, but in less than a month sickness so reduced the men that practically the whole of the detachment had to be sent home. During a survey expedition up the river Prah. Commodore Commerell was wounded, when the boats were fired upon by the enemy from the dense bush. The commodore's wound proving troublesome, he had to leave the coast, and the command again developed on Captain Fremantle. There followed frequent collisions with the enemy, in which the brunt of the work fell upon the naval force; but early in October Sir Garnet Wolseley arrived with 1500 British officers and men to stiffen the Houssa troops that had been assembled. To Sir Garnet's army was attached a naval brigade of nearly 300 officers and men, under Captain Hunt-Grubbe of the "Tamar," one of the vessels of the squadron that was commanded by Commodore W. N. Hewitt, V.C. The punitive force found the climate far more deadly than the enemy, and the filtering of water and dosing the men with quinine were most imperative. There is no need to follow the movements of the British troops against a brave enemy, utterly unable to cope with the arms of their opponents. They decided that the British did not fight fair, as they fired without reloading; and the Ashanti prisoners in their superstitious simplicity placed their hands over the hearts of the whites in the hope that they might become imbued with some of their powers and courage. Kumasi, the capital, was occupied, and Koffee Kalkalli fled to the bush. The naval brigade's casualties were I officer and 4 men wounded. In his despatch to the Government, Sir Garnet Wolseley testified to the services of the men placed at his disposal by Commodore Hewitt: "All have fought throughout the campaign with the dashing courage for which seamen and marines are so celebrated." The losses of the naval brigade were almost solely due to sickness. During the operations 95 per cent. of the men were sick at some time or other. and 40 per cent, had to be invalided home.

On 29th May 1877 occurred an opportunity for a practical test of our improved armaments. Peru was in the throes of a revolution, and the leader of the insurgents, Don Nicolas Pierola, seized the small ironclad "Huascar" and commenced bombarding towns along the coast, except where ransom was paid to avoid damages. The rest of the Peruvian navy consisted only of another small ironclad, a corvette and a gunboat; this trio encountered the "Huascar," but an engagement of an hour and a half resulted in little or no damage on either side.



THE ASHANTI CAMPAIGN, 1873

The "Huascar" had been built at Birkenhead in 1865. was of 1130 tons burden, and steamed at ten or eleven knots. principal guns were a couple of 10-inch Armstrong pieces, carried in a closed turret forward, and throwing a 300-lb. projectile; she also carried two 40-pounder rifled pieces, and a 12-pounder. The turret armour was $5\frac{1}{2}$ inches thick; the side plating was $4\frac{1}{2}$ inches, tapering to 2½ inches at the bow and stern. Her bows were constructed with a view to effective ramming.

When the "Huascar" stopped British mail-steamers and commandeered coal and stores, Rear-Admiral Algernon de Horsey, on the Pacific station, set out in the "Shah" to search for the pirate. Our vessel was of 6250 tons burden, but unarmoured; she had a speed of 15 knots, but was not a ship easy to handle. She was ship-rigged with heavy masts and spars, and her crew numbered 602 officers and men. She was accompanied by the "Amethyst," of little or no fighting value, as she carried nothing bigger than a 64-pounder. The "Shah" was armed with two 12-ton guns, throwing projectiles of 200 lbs., assumedly capable of penetrating 8.4 inches of wrought iron at 2000 yards; sixteen 61 ton guns, eight on each broadside, throwing 112-lb. shot that would pierce

 $5\frac{1}{2}$ inches of iron at 2000 yards; and eight 64-pounders.

Admiral de Horsey found the "Huascar" lying off Ylo, and at once demanded that her flag be hauled down. No reply was vouched by Pierola, and the British admiral fired a shot across the "Huascar's" bows. The insurgent replied with a shell from her turret and then got under way, steaming to and fro before the town. This manœuvre made it difficult for the "Shah's" gunners to avoid bombarding the town, to which it was not desired to do any damage. Ylo Bay is full of rocks and shoals, and as the British ship drew 8 feet more of water than her opponent, she could not get closer to her than 1500 yards; and most of the firing took place at 2000 yards. Theoretically, from that distance the "Shah" ought to have riddled the smaller turret-ship, whereas after a considerable time she was practically no worse for the encounter, which had been in progress for about two hours.

About five o'clock the vessels happened to be clear of the shoals and the "Shah" closed in. The "Huascar" also closed with the idea of ramming, firing shell from her 40-pounder as she came on. When the upper deck had to be deserted owing to the effectiveness of our Gatling gun fired from the foretop, the captain of the "Huascar" went about, refusing to face the music any longer. The "Shah" next discharged a Whitehead torpedo, but nothing happened, simply because the missile, travelling at only 9 knots an hour, could not overtake a vessel that was doing to knots. This was the first time a torpedo had ever been fired in desperate purpose. The only thing that could be said for it was, that it was fired straight, and would have settled the fate of the enemy had

the "Huascar" stood on. Pierola now desired nothing more than to get away. To that end he steamed close in under the town, and during the night he disappeared. Two days later, however, he

surrendered the ship to the Peruvian Government.

This action with the "Huascar" was no testimonial either to the gunners of the "Shah," or the effectiveness of her projectiles. The enemy was struck with heavy missiles only four times. A shot from a 12-ton gun struck the armour plating on the starboard side, and penetrated to the teak backing, but did no effective damage; two shots from the 6½-ton guns only dented the side armour instead of penetrating it; while another struck the turret and remained sticking in the armour. The 64-pounders of the "Shah" and "Amethyst" certainly did considerable damage to their opponent's funnel, boats, and upper works, but nothing to militate greatly against her seaworthiness, and of her crew only one was killed and several wounded. Fortunately for us the "Huascar" could hit nothing. The "Shah's" hull was untouched; but if the enemy's 300-lb. projectiles had hit her, instead of splashing water over her, the result would have been disastrous, whereas the whole affair was merely a most unsatisfactory episode.

When Great Britain annexed the Transvaal in 1877, it brought us face to face with the Zulus, the most formidable natives in South Africa. Cetewayo, their warrior king, had been engaged in hostilities with the Boers and had met with some success, which led him to threaten Natal, on whose frontier a great Zulu army was assembled. This standing menace to our colony could not be tolerated, and as Cetewayo would not disband his forces, nor moderate his excesses against native opponents, in the autumn of 1878 it was decided to take active measures against him. Sir Bartle Frere, High Commissioner of South Africa, instructed Lord Chelmsford to invade Zululand. This gallant officer underrated the enemy, who could put 40,000 brave, and fairly disciplined, warriors in the field. For such an undertaking an army of 20,000 troops was needed, whereas we commenced the campaign with about one-third of that number. The operations were protracted, and our arms met with more than one disaster before Cetewayo was defeated and his power broken; but our present purpose is to describe only those actions in which the naval forces were employed.

Lord Chelmsford divided his heterogeneous army into three columns, each to operate independently. The right column was commanded by Colonel Pearson of the Buffs. It consisted of 2055 Europeans and 2340 natives, almost one-half of the latter belonging to the 2nd Natal Native Regiment. The naval brigade, under Captain H. F. Campbell, was drawn from H.M.S. "Active"; it was 172 strong, with two 7-pounder guns, one Gatling and two rocket tubes. On 22nd January about a quarter of Colonel Pearson's

force engaged with from 5000 to 8000 of the enemy at Inyezane. The Zulus fought stubbornly, but the blue-jackets and a company of the Buffs advanced splendidly, and the rocket tubes, in particular, were very effective. After three hours' strenuous fighting the Zulus retired, having lost 300 men killed, and a great many wounded. The British losses were 2 officers and 7 men killed, and 15 wounded, 7 of the latter being blue-jackets. The force reached the mission station at Etshowe on the next day, from whence it was intended to send a flying column to operate with the other two forces in an advance on Ulindi. As matters turned out, Colonel Pearson was destined to stay at Etshowe far longer than had been anticipated.

On the same day that the right column defeated the enemy at Inyezane, the centre column met with disaster at Isandula. While Lord Chelmsford was engaged to miles off with half his column. the camp was attacked by a horde of Zulus, who wiped out 26 officers and about 600 non-commissioned officers and men of the 24th Regiment and quite 400 of the Natal Volunteers and Natal Native Horse, etc. Two guns, numerous wagons and oxen and 1200 rifles were carried off by the enemy. The only sailor in the camp was one of the "Active" men, who was seen with his back against a wagon wheel, slashing at the enemy with his cutlass, until a Zulu crept up in the rear and stabbed him through the spokes. But for the succeeding heroic defence of Rorke's Drift, by Lieutenants Bromhead and Chard with about 100 men, against 4000 of the enemy, the Zulus would have overrun Natal. For twelve hours this little force of desperate men defended themselves against the fierce rushes of the dusky warriors, until the remnant of Lord Chelmsford's column came to the rescue.

Thus, instead of sending a flying column to aid the other British forces, Colonel Pearson, at Etshowe, received a message from the general in command informing him of the disaster at Isandula; and warning him to prepare for the Zulus, who would assuredly attack in great force. Colonel Pearson had about 1300 effective fighting men, and he decided to fortify Etshowe and hold it until relief came. In a very short time the position was surrounded by the Zulus, who, however, did not venture to make an attack on defences that could not have been reduced without artillery. The greatest trouble of the garrison was malarious sickness, the outcome of the wet season and work in the broiling sun. The men of the naval brigade were occupied prominently in the defence, and they also took part with a detached column that destroyed a big Zulu kraal not far from the beleaguered post.

In view of the disaster at Isandula, it was evident that reinforcements were necessary before the relief of Etshowe could be attempted, while for the proper invasion of Zululand a greatly enlarged force would be required. Very shortly Lord Chelmsford

was strengthened by the addition of a detachment of seamen and marines furnished by H.M. ships "Boadicea," "Shah," and "Tenedos." A column for the relief of Etshowe was organised with all speed. The British force crossed the Lower Tugela. and on 1st April entrenched themselves for the night at Ginghilovo. Early on the next day a Zulu army, 12,000 strong, made a determined attack on the laager, whose four angles were defended by the naval brigade with the guns. The Zulus came on in several dense columns. At 1000 yards they entered the fire of the Gatlings, but surged forward. At 300 yards a hail of lead poured upon the warriors from the trenches around the laager. No matter how desperately the enemy charged, they always met with a continuous stream of bullets; and then into their shaken masses charged the cavalry to complete their defeat. This victory, which effected the relief of Etshowe after ten weeks' isolation, cost us II killed and 52 wounded. The Zulu losses were about 1200, more than one-third of them being killed.

Sufficient reinforcements having reached South Africa by the middle of April, preparations were at once made for the invasion of Zululand. To the first division, under Major-General Crealock, was attached a powerful naval brigade of 800 men. This force formed provision depots on the Tugela and Inyezane rivers. In the meantime the second division reached Ulundi on 4th July. As the naval brigade took no part in the final battle, it need only be said that Cetewayo's huge force was overwhelmed. While at a distance the artillery shelled the Zulus with great effect; at close quarters the Gatlings and breech-loaders shattered the dusky foe to pieces; and then the 17th Lancers charged and broke them up. The victors lost only 13 killed and 78 wounded. The battle of Ulundi ended the Zulu War. In the succeeding month Cetewayo was hunted down and taken a prisoner to Cape Town.

During the eight months' operations against a brave, if savage, foe the seamen took an active part on nearly every occasion; and in addition to fighting, they rendered most useful service in making forts and bridges. Previous to their return to their ships, Sir Garnet Wolseley, who had succeeded Lord Chelmsford in the command, said: "The conduct of the men has been admirable, and their bearing in action in every way worthy of the service to which they belong, while they have worked hard and cheerfully in their laborious duties, which constitute so important a part of all military operations. They would have the satisfaction of knowing that all recollections of the Zulu War would ever be associated with the naval brigade, which had borne so distinguished

a part in it."

In 1883 Cetewayo was allowed to resume his rule over a great part of his former kingdom, as our division of it into various states under native chieftains had not proved a success; but in 1887 the whole of Zululand passed under the British flag, being divided into districts, each governed by a magistrate with soldiers and police.

Early in 1882 it was evident that Egypt was a hotbed of sedition, and in May matters were brought to a head by the rebellion of Arabi Pasha against the Khedive. We fought the battle of the Nile in 1798 to safeguard our approach to India, part of the route being overland across Egypt from the Mediterranean to the Red Sea. The opening of the Suez Canal in 1869 gave us another all-water route to India, and a shorter passage than by way of rounding the Cape of Good Hope. Rebellion in Egypt might endanger the safety of the canal, and hence foreign intervention was necessary not only in our own Indian interests, but for the sake of the commerce of all Europe with the East. Great Britain invited France to co-operate in measures to secure peace in Egypt, but our neighbour refused to join us, and we decided upon energetic measures on our own account.

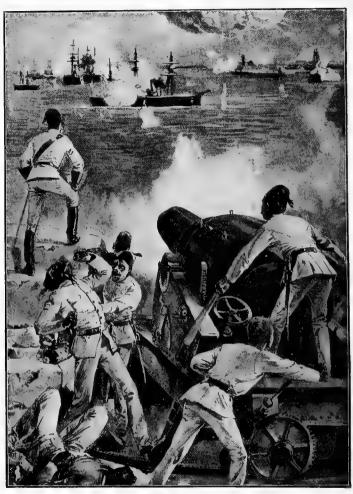
In June we had a large force of 24 vessels in Egyptian waters, under Sir Beauchamp Seymour, while the Channel Squadron was on its way to Malta to act as a support. Meanwhile Arabi was practically master of Egypt; the fortifications of Alexandria were being strengthened; and our mercantile vessels in the harbour were being threatened. Early in July the British admiral ordered the work of improving the Alexandrian defences to cease. This elicited only an evasive reply, upon which an ultimatum was sent. Arabi was defiant, and it was decided to bombard the works.

All the trading craft and foreign warships had cleared out of the harbour, which, with the whole sea front, was left to the British squadron of eight great ironclads and half a dozen gunboats, as follows:—

vincible			•		Sir Beauchamp Seymour R. H. More Molyneux
ıltan ''.				,,	W. J. Hunt-Grubbe
iperb '' .				,,	T. Le H. Ward
				,,	F. Hotham
onarch ''				,,	H. Fairfax
nelope ''				,,	St George C. D'Arcy Irvine
				,,	J. A. Fisher
				"	H. F. Nicholson
	ultan ''. uperb ''. lexandra onarch '' enelope '' flexible ''	ultan ''	altan ''	altan ''	Captain Iltan ''

The squadron carried 80 heavy guns, that varied from the 7-inch to the 16-inch 80-ton gun of the "Inflexible." It must be remembered that never in the history of warfare had such ponderous artillery been employed; and the eyes of the whole naval world

would watch to see the effects of missiles three-quarters of a ton in weight. The majority of our vessels, however, were broadside ironclads, so that not many more than half of the whole number of



THE BOMBARDMENT OF ALEXANDRIA—THE EGYPTIAN GUNNERS MADE EXCELLENT PRACTICE AGAINST THE "ALEXANDRA"

guns could engage at the same time. The regular flagship of Sir Beauchamp was the "Alexandra," but he changed into the "Invincible," as her lighter draught would enable her to get over the bar of Alexandria, whereas the "Alexandra" would have to remain outside it. The Egyptian forts extended for almost eight miles.

They were not the strongest of fortifications, and their magazines were not well protected; but on the whole the defences were low, and from the sea were difficult to distinguish from the coast-line. The forts mounted nearly 40 rifled guns, and about 200 smooth-bores.

On 11th July the "Invincible," "Monarch," and "Penelope" were in the harbour. Outside were the "Alexandra," "Superb," and "Sultan." The "Inflexible" anchored off the Corvette Channel, and the "Téméraire" was close to the "Boghaz," or channel leading into the harbour. At 7 A.M. the "Alexandra" fired a shell into the new earthworks known as the Hospital Battery. The action speedily became general between the ships and the whole of the forts. The "Alexandra," "Superb," and "Sultan" were firing as they steamed slowly to and fro across the front at a range of from 1000 to 3000 yards. The Egyptians replied with spirit, and some of their gunners made excellent practice against the "Alexandra." One shell dropped near the sheep pen and wiped out the terrified animals, and another chipped a piece out of the main-mast. One missile smashed the steam launch, killed one man and injured several others. A fourth shell came through the port bulwark into the commander's cabin, where it exploded and wrecked everything in the vicinity. Still another shell arrived that might have worked infinite damage, but for the magnificent heroism of Gunner Harding, as related in a later chapter. After nearly three hours' steady firing the "Alexandra," "Superb," and "Sultan" were joined by the "Inflexible," and the quartette came to anchor off the Lighthouse Fort in order to attack the works on Ras-el-Teen.

The "Inflexible," by common consent, was regarded as the most formidable fighting craft afloat. She carried four 80-ton guns, the heaviest ordnance of that day, and she was one of the first ships to be fitted with electric power for various purposes on board the ship. When she gave the signal for the action to commence "a deafening salvo from five 9-inch guns went from her side, while overhead ten Nordenfeldt guns in the tops swelled the din which burst forth from all the ships." The captain of this naval "wonder of the world" was John A. Fisher, who afterwards rose to be First Sea Lord of the Admiralty, where he rendered magnificent service to the Navy and his country.

It did not take long to silence most of the guns on Ras-el-Teen, except some heavy ordnance on Fort Ada. Presently, however, a shell from the "Superb" blew up the magazine, and the garrison, or what was left of it, retreated. The guns of Fort Mex had been disabled previously by a landing force from the "Inflexible." One of the landing party was Flag-Lieutenant Hon. Hedworth Lambton. They got ashore through the surf, under cover of the fire of the gunboats, and blew up two big guns with gun-cotton,

and spiked half a dozen smooth-bores. The four ships were joined by the "Téméraire" at 2.30, and Fort Pharos, with its 45 guns, received special attention. They were duly silenced, one of the guns of greatest calibre being dismounted. The Hospital Battery was well fought from first to last. It was silenced for a time by a shell from the "Inflexible," but the firing recommenced, and was maintained until 5 P.M. The British gunners were remarkably keen on their work. On the "Inflexible" the vent of an 80-ton gun choked. Lieutenant Younghusband had himself pushed into the gun as far as the powder chamber, where he cleared the vent with his fingers. When he was hauled out by a rope, attached to his feet, he was found to be half suffocated by the powder gases.

Meantime the three ships within the bar had been fully occupied. The "Invincible" and "Penelope" were at anchor, while the "Monarch" was under weigh. After several hours the Mex batteries were partially destroyed, and the guns silenced, but Fort Marsa-el-Kanat offered resistance to the "Monarch" for half an hour, when the British ironclad exploded the enemy's magazine,

which reduced the adjacent works to dust.

One of the best-known features of the day was the conduct of the gunboat "Condor," Commander Lord Charles Beresford. The attack on the Marabout batteries at the entrance to the harbour had been left to the gunboats. The ordnance of the Marabout comprised two 18-ton guns, two 12-ton, twenty 32-pounders, and 5 mortars. These guns, however, were so trained that they could not be fired below a certain angle. If a gunboat could once get through the zone of fire, and under the fire angle of the fort, she would be comparatively safe from serious attack, while at short range she would be able to work tremendous damage to the enemy. By splendid handling the "Condor" got to the desired position without being struck once, and then she commenced to use her guns with terrific effect. One of the Egyptian gunners, in particular, was doing excellent work against some of the other ships. It is said that Lord Charles Beresford exclaimed, "Hit that gun!" and almost at once one of the "Condor's" 9-inch shells toppled over the weapon that the obnoxious Egyptian gunner had been serving so well. Shortly the gun was remounted, and the gunner again was particularly active. "Hit that gunner," shouted Lord Charles. "Where, sir?" inquired the "Condor" gunner. "In the eye," replied the commander, breezily. The gun was fired, and an explosive shell took off the Egyptian gunner's head. For an hour the "Condor" maintained a duel with the fort, during which the gunboat was not hit seriously. Almost single-handed she silenced the Marabout, cliciting the admiration of Admiral Seymour, who signalled from the flagship, "Well done, 'Condor!"

Except for stray shots, the enemy had abandoned the fortifications by 5 P.M., about which time the fire from the squadron ceased. During the whole of the day's operations only 75 of the enemy's projectiles struck our ships. Out of this number the "Alexandra" received 31, "Invincible" 15, "Sultan" 12, leaving only 17 among the "Penelope," "Superb," and "Inflexible"; the "Monarch"



FOR AN HOUR THE "CONDOR" MAINTAINED A DUEL WITH THE FORT

and "Téméraire" suffered no damage. Our losses were only 6 killed and 27 wounded. The Egyptians must have lost heavily, as they served their guns under a hail of shot, shell, and machine gun bullets, amid masses of falling masonry.

On the next morning there was no need to resume the bombardment, as, after a few shots, a flag of truce was seen flying from the Egyptian arsenal. Alexandrial was partly in ruins, the mutineers having fired the city. Admiral Seymour landed marines and seamen, who cleared the streets of thieves and incendiaries, while a strong guard was placed round the palace of the Khedive, who would have been assassinated but for the timely arrival of the force from the ships. An examination of the defences of Alexandria showed that the bombardment had worked less destruction than had been anticipated, for a great deal of the damage could have been put right in a few hours. For use against earthworks a few heavy guns did not yield so good a result as would have been obtained from the employment of a greater number of smaller ordnance.

Sir Garnet Wolseley, who was in command of the military operations, abandoned Alexandria as his base of operations, and proceeded to seize Ismailia and Port Said, which were captured and occupied, the first-named by Captain Fairfax, with a force of seamen and marines from the "Monarch," and the latter by Captain Fitzroy of the "Orion." The succeeding events in the war cannot be detailed, although a naval brigade rendered splendid assistance to Sir Garnet Wolseley upon many occasions. At Tel-el-Kebir Arabi Pasha was routed, and afterwards was condemned for treason and exiled to Ceylon. But the rebellion spread to the Sudan, and British and Egyptians had to contend with the Mahdi, who threatened to become master of the whole country. General Gordon was in charge of the Egyptian garrison at Khartum, where it was hoped he would be able to influence the Arabs not to take up the cause of the Mahdi.

Early in 1884 the Navy was taking part in an expedition, under General Sir Gerald Graham, which aimed at the relief of Tokar, where the forces of the Mahdi had cooped up another Egyptian garrison. In these operations the army was accompanied by a naval brigade of 150 seamen and officers, with 6 machine guns, under Commander Ernest Rolfe, and at El Teb, on 29th February 1884, the seamen rendered a brilliant account of themselves. Sir Gerald Graham thanked the naval brigade "for their cheerful endurance during the severe work of dragging the guns over difficult country, when suffering from heat and scarcity of water, and for their ready gallantry and steadiness under fire while serving the guns." It was at El Teb that Captain A. K. Wilson, of the "Hecla," won the Victoria Cross.

At last it was obvious that Nubia, or the Sudan as it was called, was lost to Egypt for the time being. The Egyptian troops could make no headway against the Mahdi and his fanatical hordes, and General Gordon was directed to withdraw the garrison from Khartum. But he was trapped by the enemy, and nothing remained for him but to hold out against the cordon, which the Mahdists had drawn round him.

In the summer of 1884 an expedition was organised for the relief of Khartum. Lord Wolseley was in command of the force, to which was attached a naval brigade under Lord Charles Beresford. The seamen rendered excellent service in transporting men and stores along the Nile route, and especially in negotiating the steamers over the great cataracts. By the end of the year the relief force had reached Korti. From that point, where the Nile makes a huge bend, a flying column made a dash across the desert. This gallant band fought the enemy at Abu Klea on 19th January 1885, and eventually struck the river again at Gubat, not far from Khartum. Four steamers shortly arrived from the city, with the news that Gordon was sorely beset, and could hold out no longer than a few days.

On 24th January Sir Charles Wilson, with 280 troops on board two of the steamers, set out for Khartum. The naval brigade was to remain at Gubat. Lord Charles Beresford went aboard the "Sofia" with a small force of seamen and one of their Gardner guns, with which the brigade had done excellent service on various occasions. The "Sofia" visited Shendi, where she was subjected to a hot fire, to which the British replied with shell and the Gardner gun, which dispersed the enemy. For several days Lord Charles patrolled the river for 10 to 12 miles in either direction, destroying earthworks, raiding villages, and capturing cattle, sheep, and goats for the camp. On 1st February Lieutenant Stuart Wortley, who had accompanied Sir Charles Wilson, arrived in a boat to report that the Mahdi's flag waved over Khartum, and that Gordon, one of the rarest types of Christian chivalry, was dead. More than that. Sir Charles Wilson had lost two steamers, and his force was encamped on an island, 30 miles south of Gubat, and not far from a hostile body of 5000 Dervishes.

Lord Charles Beresford at once put a special crew and 20 picked Infantry marksmen aboard the old crank "Sofia." Against the stream the steamer could only make two and a half miles per hour. All went well until Wad-el-Habeshi was reached, where the 5000 Dervishes lay strongly entrenched, and having three heavy guns behind earthworks. About a quarter of a mile higher up the river could be seen the wreck of one of Sir Charles Wilson's steamers,

near by the island where his force had taken refuge.

In order to reach Sir Charles Wilson, the "Sofia" had to run the gauntlet of the Dervish fort at a distance of only 80 yards, the chances were that she would be disabled by the enemy's guns. Lord Charles ordered that the machine guns should be fired directly into the embrasures of the fort, and thus prevent the gunners from pointing their ordnance on the steamer. So well were these instructions carried out that the Dervish guns could not be fired upon her while she was beam on. But the "Sofia" was not to escape altogether. When the steamer had passed the fort some 200 yards, and the machine guns could no longer keep up a terrific fire on the embrasures, the enemy contrived to put a shot into the

rickety steamer's boiler. A cloud of water and steam rose from the vessel, badly scalding seven men. Sir Charles Wilson's feelings may be imagined, for to him it appeared as if the "Sofia" had

blown up.

Lord Charles, however, was not despondent. Before the "Sofia" lost way, she was run across to the opposite bank and brought to anchor about a quarter of a mile from the fort. A Gardner gun was shifted to a platform that had been rigged up aft, and for the rest of the day this gun had to keep the enemy's fire under; but it did not prevent the Dervish "rifle bullets from rattling like hail on the sides of the steamer" as long as light lasted.

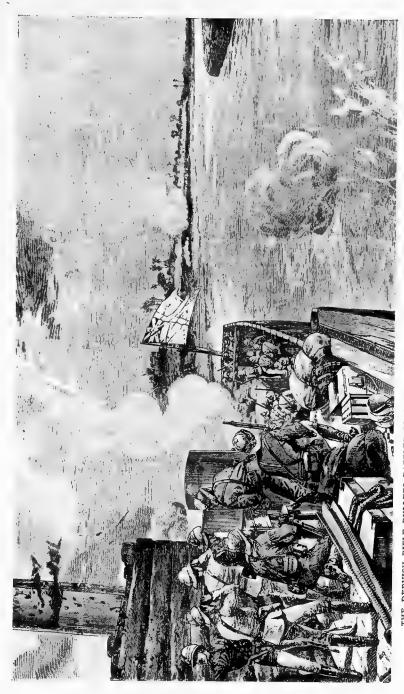
It was arranged to repair the boiler as soon as it cooled. A message was sent to Sir Charles Wilson to send his wounded in a nuggar past the fort under cover of darkness; while his other men were to land on the bank opposite to the fort and march to an

agreed spot, where they could be taken aboard.

Chief-Engineer Henry Benbow got to work on the boiler at II A.M., four hours after it was struck, and the job kept him employed for ten hours. As Lord Charles said in his official report: "Too much credit cannot be given to this officer, as he had to shape the plate, bore the holes in plate and boiler, and run down the screws and nuts, almost entirely with his own hands, the artificers and every one in the stokehole having been scalded severely by the explosion, when the shot entered the boiler. The plate was 16 inches by 14, so that some idea can be formed of the work

entailed upon him."

At five o'clock next morning the fires were lighted, and all precautions were taken to prevent sparks from being emitted from the funnel; and it was not until daylight and steam was up, that the enemy discovered that their chance of destroying the vessel was lost. By the time their gunners got to work, the "Sofia" was making her way southward for a distance of nearly a mile. where the river was wider and would allow of easy turning. This accomplished, the steamer came past the fort at a good rate, the machine guns playing on the embrasures of the fort as before. It was then found that the nuggar containing the sick and wounded had gone aground on a rock, just within range of the fort. Lord Charles again anchored and sent Sub-Lieutenant Colin Keppel—son of a gallant sire, Admiral Sir Henry Keppel-with a party to get her off. This task, calling for coolness and bravery, occupied three hours, all the time under the fire of the battery. Later on, Sir Charles Wilson and his force were picked up, and the "Sofia" proceeded down stream to Gubat. If Benbow had not put that patch on the boiler, disaster would have waited upon the whole expedition. As a personal testimony to the engineer's merits, Lord Wolseley some weeks afterwards presented him with his own silver cigarette-case, an act which delighted the blue-jackets. Later.



THE DERVISH RIFLE BULLETS RATILED LIKE HAIL ON THE SIDES OF THE STEAMER AS LONG AS LIGHT LASTED

Mr Benbow received other rewards. He was specially mentioned in despatches; the Secretary of the Admiralty testified to his services in the House of Commons; and he was promoted to Inspector of Machinery. In after years he rose to greater honours: he received the D.S.O. in 1891 on the birthday of her Majesty Queen Victoria, and a year later he was gazetted K.C.B.

The rest of the campaign must be told briefly. For six months the garrison at Suakin had held out gallantly against Osman Digna, who would have captured the town but for the guns of several small ships that had been stationed there. Early in 1885 it was decided to construct a railway from Suakin to Berber on the Nile to prepare the way for a large force to subdue Osman. By March an army of 12,000 men was ready to tackle the enemy. In addition to troops from home, there were contingents from India and Australia. For the first time in our history the Mother Country was assisted by her sons from across the seas. Sir James M'Neil set out with a strong column to attack Tamai, one of the strongholds of the enemy; and with him went a naval brigade with machine guns from the ships in Suakin harbour, under Commander Sir Cecil Domville.

On 22nd March, while the British force was constructing a zareba, some thousands of Arabs suddenly came to the attack. As the enemy penetrated the zareba at more than one point by sheer weight of numbers, the position was exceedingly critical; but at last the deadly fire of the Gardner guns turned the scale in our favour, and the enemy beat a retreat, leaving about 1500 dead on the field. In this stern encounter the seamen were in the thickest of the fight, and they suffered considerable loss; among the dead was Lieutenant Seymour of the "Dolphin," who commanded the naval division in the northern redoubt. Shortly afterwards it was decided to withdraw the British troops from the Sudan. Our forces returned to Cairo, from whence the troops were despatched home, while the seamen returned to their ships.

As a result of operations against the Burmese in 1824-26, and again in 1852, we had secured a portion of Burma which included a great deal of the coast-line of the country. In the meantime our commercial relations with the Burmese had grown to considerable importance, especially since steam vessels had led to increased trade on the Irawadi. Just at the time when the country was ripe to reap the benefits of intercourse with Great Britain, King Thebaw succeeded to the throne. His methods of rule were atrocious in the extreme. He instigated frequent massacres of his own people, and placed all kinds of offensive restrictions upon British traders. In 1885 matters reached such a pass that the Marquis of Dufferin, Viceroy of India, offered to arbitrate between Thebaw and the European traders, but the king rejected the proposal. In October

of the same year an ultimatum was despatched to the recalcitrant monarch and this, producing no effect, led to a declaration of war

against Burma on 8th November.

As it had been very evident that Thebaw would ignore all mere remonstrances, an expedition already had been prepared by the Indian authorities. The force comprised three brigades of infantry, six of artillery, and six companies of sappers, under the command of Lieut. General Prendergast. The naval squadron, under Rear-Admiral Sir Frederick Richards, was placed at the disposal of the Viceroy to act in any operations within the scope of the "handy man." As the objective of the expedition was Mandalay, the capital of Burma, the operations would follow the course of the Irawadi, and for the transport of the force light-draught steamers would be requisite. The provision of these vessels, steam launches, etc., was undertaken by Sir Frederick Richards, who chartered a number of miscellaneous craft, that were armed with machine guns, etc., taken from the ships of the squadron. Some heavier guns were mounted on barges, which were secured alongside the steamers; and these were armoured with iron plates. The whole flotilla was manned by a naval brigade, composed of men drawn from the "Bacchante," "Turquoise," "Mariner," "Woodlark," and "Sphinx," and under the command of Captain Woodward of the "Turquoise."

By the beginning of November the land force was ready and was transported to Rangoon, from whence it was conveyed to Thayetmyo on the River Irawadi, not far from the old frontier line. When the entire force commenced the advance by water, no resistance was offered until Minhla was reached, a little more than half way to the capital; and there the Burmese in some considerable force had built and fortified a redoubt that commanded the The enemy was attacked by land and water, and in the end the redoubt fell into our hands, with a loss of 4 killed and less than 30 wounded. At various points along the river there was opposition, but nothing that the force did not overcome with ease. In the last week of November Ava was approached, but before the fortifications were attacked Thebaw sent envoys requesting a stay of hostilities. General Prendergast would consider nothing less than the unconditional surrender of the king, his army, and capital; and pending a reply preparations were pushed forward for an attack upon Ava. But on the 27th arrived a letter in which all the British demands were conceded, and on the next day our troops were masters of the capital. King Thebaw had made no attempt at escape; he surrendered himself with apparent unconcern, and was deported from the country that he had done his best to ruin.

Within the capital we captured a large number of guns, much ammunition, and miscellaneous valuable property. Although there was little fighting, the organisers of the expedition could pride themselves upon the short but brilliant campaign. Within

a period of two weeks a comparatively unknown river had been traversed for a distance of 200 miles, the surveying having to be accomplished as the force proceeded. The planting of the British flag on Mandalay led to the annexation of the whole country, which meant the addition of some 180,000 square miles of territory to the Empire. The general in command paid high tribute to the services rendered to the expedition by the officers and men of the Royal Navy, upon whose shoulders much heavy and important work had fallen. During the next year Burma was in a state of great unrest, caused chiefly by the disbandment of the native army, which led to raiding by scattered bands of rebels. After a few months' vigorous work by a small naval brigade from H.M.S. "Mariner" and "Ranger," the rebels quietened down, and Burma entered upon a period of tranquillity, during which the country has prospered immensely.

In an earlier chapter reference was made to the efforts of Great Britain to suppress the slave trade (p. 434). On the east and west coasts of Africa in particular for many years British ships found work awaiting them in the capture of Arab slave-dhows. Many thrilling encounters could be enumerated, but a couple of incidents in the late 'eighties must serve to show that the traffickers in human flesh found their business too profitable to relinquish without a struggle. In June 1887 H.M.S. "Turquoise" was off the island of Pemba, East Africa. While her steam pinnace, in charge of Lieutenant F. F. Egan, was patrolling the coast on the look-out for slavers an Arab dhow put in an appearance, and made a determined attempt to run down the pinnace and board her. Arabs found the proposition to be a remarkably tough one. lieutenant and his men speedily showed that boarding was out of the question. Egan himself shot two Arabs and ran a third clean through the body, while his crew backed him up with furious energy. Even after he was wounded, the lieutenant fought desperately, until the dhow broke clear and endeavoured to make off, with the pinnace in full chase. Shortly the Arab craft was in difficulties and eventually capsized; whereupon Egan and his crew set to work to rescue the Arabs and their wretched cargo of slaves.

In the autumn of the following year Lieutenant Myles Cooper, in the steam cutter of H.M.S. "Griffon," encountered a slavedhow off Jondoni, East Africa. Closing with the enemy, the lieutenant called upon her to lower sail, instead of which she opened fire on the cutter. Lieutenant Cooper was mortally wounded and two of his crew were also struck down. The lieutenant gasped out to John Bray, the ship's corporal, "Never mind me, do your best." Bray nobly stepped into the breach and with only four unwounded companions contrived to overcome the crew of the dhow and towed her to the "Griffon," but in the meantime Lieutenant Cooper died.

There was a civil war in progress in the island of Samoa in the South Pacific Ocean in the early part of 1889. On 15th March the harbour of Apia was crowded with small merchant vessels, but to congest still further the limited space, there were present no less



LIEUTENANT EGAN SHOT TWO ARABS AND RAN A THIRD CLEAN THROUGH THE BODY

than seven ships of war, which had been sent there in order to protect the interests of foreigners engaged in the trade of the island. These vessels comprised three German warships, the "Adler," "Eber," and "Olga"; three American, the "Nipsic," "Vandalia," and "Trenton," Rear-Admiral Kimberley; and one British, the "Calliope," Captain Henry Kane. The harbour at Apia is bottle-

shaped with a funnel mouth; it is bounded and lined with coral, and a coral shore reef runs into the basin, and presents an acute danger spot opposite the fairway of the entrance. Outside the reef the Pacific surf thunders formidably, and even within the barrier the swishing waters interfere with all conversation out of doors. So overcrowded was the harbour on this particular day, that the "Vandalia" and "Trenton" were anchored in the entrance, simply because there was not sufficient room inside.

Even moderate storms in this part of the world bear reputations of the worst. At two o'clock the state of the barometer gave warning of a coming storm, that ought to have caused Admiral Kimberley to take the lead out to sea; but as he remained at his moorings, the Germans doggedly stuck to theirs. Captain Kane was misled by the advice of residents, as well as a deluding rise in the glass, and he, therefore, stayed with the others. The night closed black with blinding sheets of rain. By midnight it blew a gale, and by morning watch a tempest was in full blast. The harbour had become a seething cauldron, in which the ships were tossed about by waves that would have been trying even in mid-ocean, but in this bottle-shaped harbour were absolutely terrible. The ships were tossed about in a helpless crowd, however gingerly they steamed to their moorings. At daylight the "Trenton" still kept her position in the neck of the bottle, but the "Olga," "Adler," and "Nipsic" had already been in collision, and each bore injuries in token of the same; the "Olga" was damaged in the quarter; the "Adler" had lost her bowsprit; and the "Nipsic" was minus her smokestack. Worse had happened to the "Eber." Some weeks previously she had damaged her screw, which by no means assisted her to battle with the storm. Dragging her anchors, she was heaved violently against the reef. She came off, only to strike again and go staggering down stern foremost in deep water, taking with her the crew of 80 men, save four souls that were thrown up on the beach.

About seven o'clock the captain of the "Nipsic" decided it was better to run his ship ashore on a strip of sand, rather than wait for worse disaster to befall him. He managed to beach her, but lost six lives owing to the capsizing of a boat. An hour later it was the turn of the "Adler." She was too close on the reef to stand the remotest chance of being saved; but the skipper hoped to be able to preserve at least some of his crew. He watched the huge seas that threatened him, and as the vessel rose on the crest of a wave, her moorings were slipped, and the sea lifted her bodily and dropped her on the summit of the reef, where she lay with her back broken owing to the violence of the concussion. She was buried in breaching seas, but for the time being she was safe; although some of her crew were injured and twenty had perished. The officers and about sixty men aboard were in a pitiable condition, and likely to remain so until a line could be got to them from the shore.

The "Calliope," "Vandalia," and "Olga" were threatening each other in turn, and the jagged coral menaced all three. The British ship had the "Vandalia" close to her port side and a little ahead; the "Olga" was close a starboard; and the reef was under her heel. Steaming and veering on her cables, the unhappy ship could only fence with the three dangers. Just before nine o'clock, her jibboom carried away the Vandalia's quarter gallery; and the next moment she was within an ace of being rammed by the "Olga" from the other side. A few minutes later the "Vandalia" could not be avoided, as she clapped her stern under the Calliope's bowsprit, bursting the fastenings asunder as she rose. Captain Kane decided that as his ship was too heavy to repeat the manœuvre of the "Adler," his only course was to get out of the harbour, if it were possible for the engines to drive her against both wind and sea.

Signalling for every ounce of steam, Kane steered well to starboard of the "Vandalia" and slipped the last cable. For a time it seemed as though the "Calliope" remained stationary, although she was full steam ahead. Then she commenced to move, but so slowly that two hours were occupied in advancing four cables' length. In the fairway lay the "Trenton," with her rudder broken, her wheel carried away and her fires extinguished. Between this sad hulk and the external reef the "Calliope" had to find a path. She found it, although her foreyard passed over the American's quarter as she rolled. Steering between the dual dangers, the great ship came triumphantly to the wind and pointed for the sea and safety. In that moment of the overcoming of a sickening peril, the Americans on the doomed flagship hailed their British cousins with a rousing cheer, led by the admiral in person. It was answered from the "Calliope," with mingled pride and emotion as she disappeared into the mists. She was safe at sea again. She was much the worse for wear—the ornamental work about her bow and stern had gone, as had three or four anchors, fourteen lengths of chain, four boats, the jibboom, bobstay, etc.

The "Calliope" returned to Apia on the 19th and found a remarkable scene of desolation. The British crew knew the fate of three vessels before they went out; but now they found that the "Vandalia," in trying to run ashore, had struck the reef and sunk, 42 officers and men going down with her. The "Trenton" had broken from her cables to drive down on the "Olga," which was forced to slip her last cable and run ashore, fortunately without loss of life. The "Trenton" herself struck the wreck of the "Vandalia," upon which the flagship partially sank, her crew reaching the shore by the aid of life lines. Of 13 sail in the harbour before

the storm, the "Calliope" was the sole survivor.

Captain Kane wrote to Admiral Kimberley thanking him for the sympathetic cheers of the Americans. The gallant old Admiral's reply must be recorded. "You went out splendidly and we all felt

from our hearts for you, and our cheers came with sincerity and admiration for the able manner in which you handled your ship. We could not have been gladder if it had been one of our ships, for in a time like that I can truly say with old Admiral Josiah Tatnall, 'That blood is thicker than water.'"

During the twenty-four hours that the storm was at its height Captain Kane practically never left the poop. In his report to



THE "CALLIOPE" POINTED FOR THE SEA AND SAFETY

the Admiralty he stated that if anything had gone wrong with the engines they "would have been done for," but thanks to the admirable order in which engines and boilers had been kept, the "Calliope" passed triumphantly through the ordeal. Chiefengineer Bourke bore testimony to the splendid manner in which his men worked without hesitation or the slightest lack of nerve. "I was about calling upon some extra men who were off duty to go below, when every man of them volunteered. Although we

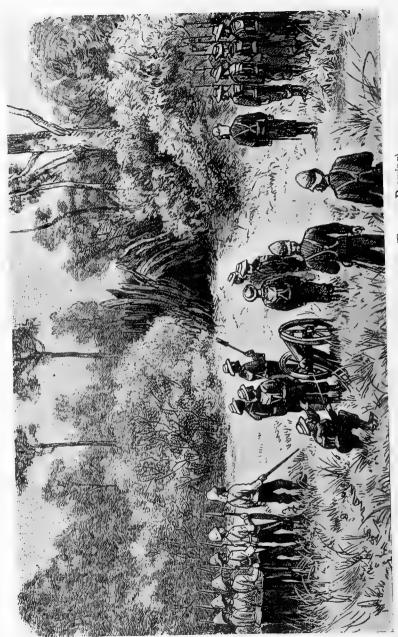
were boxed up in the engine-room and stokehold, and could hardly hear each other's voices for the howling of the storm, yet every man did his duty without a murmur. It takes a time like that to show what a Britisher is!"

In September 1890 a number of Europeans were murdered in the Witu territory, north of Zanzibar. The leader of the massacred party was one Herr Küntzel, a German; and there appears to be little doubt that his conduct was provocative in no small degree. It is uncertain who fired the first shot, although the Sultan of Witu declared it was Küntzel. Neither is it very material: the Germans were killed by the angry natives, who were eager for an excuse to vent their long simmering dislike of Europeans. When the Germans were down, the natives ran amok among the few white settlers, of whom some were killed. The house of an English missionary was destroyed, although the missionary himself contrived to effect his escape.

The British Consul-General called upon the Sultan of Witu, to visit Lamu, there to give an account of the outrage, which he was believed to have instigated or which, at least, had his sympathy. As he declined to obey the bidding, Vice-Admiral Sir E. R. Fremantle was instructed to organise a punitive expedition against Witu, the capital. The squadron, which assembled at Kipini, south of Lamu, consisted of the "Boadicea" (flagship) and eight other vessels. A couple of boat expeditions, under Flag-Captain Curzon Howe and Commander M'Quhae respectively, were despatched to destroy certain villages on the coast where outrages had occurred. At these places the natives offered only the most feeble resistance;

the villages were evacuated and burned.

The expedition for the advance upon Witu had Admiral Fremantle in chief command; Captain Hon. Curzon Howe was his chief-of-staff, and upon him fell the details of organisation. marines, infantry brigade, and field battery were commanded by Lieut.-Colonel Poole, Commanders Gardiner and Montgomerie Two battalions of seamen were commanded by Lieutenants Ainger and Jerram; and Commander M'Quhae acted as quarter-master-general. The British East Africa Company assisted with 100 Indian police under Captain Eric Smith, and also provided guides and porters. Landing a naval brigade of 700 seamen and marines from ships four miles from shore, in a heavy sea and over a dangerous bar, without accident, was a smart performance at the outset. The fourteen miles from Kipini to Witu proved a trying march. Part of the route was through heavy sand, followed by territory covered with brushwood, or with elephant grass, higher than the men's heads. Each man carried a weight of 50 lbs., including his blanket; and the dragging of the eight guns through the difficult country was no easy task. About 4.30



BLUEJACKETS DEMOLISHING WITU GATEWAY. (From a Drawing)

a halt was called for the night, and the force formed a zareba, or bush fence, around the camp. While this work was in progress the natives came to the attack, but did not long face the sharp fire

directed upon them.

The advance was resumed the next morning, and the force speedily was called upon to meet the desultory fire of the enemy, who fell back before the British skirmishers. When Witu was approached, it was found to have a heavy gateway at the entrance. When our men opened fire, it elicited no response. A small party then advanced to the gate and shattered it with gun-cotton. Upon the whole force entering the town, it was found that the enemy had evacuated it with the exception of a few wounded men. It was decided to destroy the town, but as fire had broken out in several places, its ruin was already assured. When the sultan's palace had been blown up, Admiral Fremantle led the force back to Kipini. From first to last our casualties consisted of only 13 wounded. The enemy was known to have lost about 100 in killed and wounded. In November 1890 not only Witu, but Zanzibar also, were added to our East Africa Protectorate.

When H.M.S. "Victoria" was completed in 1889, she was viewed as one of the finest ships yet added to the Navy. In 1893 she was attached to the Mediterranean Squadron, where she was the flagship of Admiral Sir George Tryon. On 22nd June the squadron was steaming from Beirout to Tripoli, and when five miles out, and proceeding in line abreast, the order was signalled for a change to line ahead in two columns. This manœuvre was duly effected and the ships were steaming in two lines, some 1200 vards apart. A fresh signal then directed them to sail back on their track, turning towards each other, which would bring them quite close together, but still in two columns. The "Camperdown" was leading one line, and the "Victoria" the other. Normally these large vessels required a circle of about 800 yards in which to turn, although it could be effected in less, if the screws further assisted by one propelling ahead, and the other astern. At 3.27 in the afternoon the manœuvre was signalled to be executed. Rear-Admiral A. H. Markham, on board the "Camperdown," doubted whether it were feasible without danger of collision, and ordered his flag-lieutenant to keep the repeating flags "at the dip," which was an intimation that the signal was not understood. followed up by an order to semaphore an inquiry to the Commanderin-chief. In the meantime, however, the "Victoria" herself signalled, asking why the "Camperdown" was waiting.

Having implicit confidence in Admiral Tryon's judgment and marked tactical ability, Admiral Markham too readily subordinated his own powers, and assumed that the Commander-in-chief proposed to circle his own line round outside the second division. There

was no such evolution provided for in the signal book, but it was nothing unusual for Sir George to spring a novelty on his squadron; and, therefore, Admiral Markham signalled in the customary manner that the chief's signal would be acted on as ordered.

The great ironclads turned in towards each other and in an incredibly short space—it was but one minute past the half hour—disaster was in the air. A collision could be avoided only by a miracle. The order was given to close the watertight doors,

followed by "Out collision mat!"

The two ships had rapidly neared one another. The "Victoria's" port engine was reversed, and when about ten points round, both engines were put "full speed astern." Admiral Tryon himself gave these orders. The "Victoria," having turned in a smaller circle, was slightly in advance of the "Camperdown," so that the stern of the latter, moving at six knots an hour, crashed into the starboard bow of her consort at an angle of 68°, exactly at 3.34. The mighty blow was delivered near the turret, and the "Camperdown's" ram tore through her victim's armour and deck for a distance of about 9 feet, treating the metal as if it were cardboard, and driving the "Victoria" sideways for 70 feet.

The "Camperdown" backed astern from the havoc she had worked, which took the form of a cavity in the hull of the "Victoria" some 12 feet across and nearly 30 feet vertically, through which water poured into the doomed vessel at the rate of 3000 tons per minute; there was also a cleft 6 feet deep in her upper deck. The "Camperdown" had not come off scatheless; she had a jagged rent in her port bow, 10 feet by 6 across, which extended from

below the water line to the edge of the armoured deck.

The "Victoria" turned round and headed for the shore, four or five miles distant. Boats were being put off from the other ships, but the Commander-in-chief signalled for the boats not to come, but for them to form on each quarter. The bows of the "Victoria" immersed rapidly. The men were up to their waists in water before they could make use of the collision mat; and it is doubtful if the inrush of water was not too sudden to permit the water-tight doors being closed. The ship lurched heavily to starboard, turned completely over with her propellers still revolving in the air, and then plunged head first amidst a maelstrom of water, from which spouted up clouds of smoke and steam.

If the Commander-in-chief had not forbidden the boats of the squadron to come alongside, the sudden and unexpected capsizing of the leviathan would have swamped them; and would have added more victims to the men who were in the water so thickly that even the swimmers could scarcely strike out. Unfortunately many poor fellows could not swim, and they sank before the boats could be rushed to the spot. However, 291 officers and men were picked up, leaving 339 who perished with the ship, among them

Admiral Tryon and 22 officers. The outside time, from when the helm was put about to commence the manœuvre to the time of capsizing, was 13\frac{3}{4} minutes. This was judging from the watch of one of the drowned officers, which had stopped at 3 hrs. 44 mins. 30 sec. But as a little time would occur between immersion and the stopping of the watch, about 12 minutes would mark the real interval between the commencement of the turning movement and the disappearance of the "Victoria" from the face of the waters.

Three hours later the squadron, with all the ships' companies dressed in white, read the Funeral Service over those who lay fathoms below. All flags were at half-mast; the "Sanspareil" fired the minute guns; and every man bared his head as the bands played the "Dead March." And overlooking the now tranquil scene was Mount Lebanon with its summit all glorious with the last rays of sunset.

The one bright spot in this dreadful disaster was the courage and fortitude of the men, the magnificent discipline that was maintained to the last moment. Captain Bourke of the "Victoria," at the court-martial which was held at Malta, placed it on record that there was no panic, officers and men keeping their stations for hoisting out boats or performing any other required duty. The forecastle men worked until they were waist-deep in water, after which they fell in orderly on the upper deck with the rest of the ship's company. In the engine and boiler rooms the officers and men stolidly yet heroically remained below at their place of duty. "It only wanted two or three to start a panic and look out for one-self, but not one was found who had not that control over himself which characterises true discipline and order. No one jumped from the ship until just as she gave the lurch which ended in her capsizing."

Admiral Tryon had frankly and nobly admitted his error to some of his officers before the ship went down, and the Court could only confirm his fault. Regret was expressed that Admiral Markham had not more vigorously signalled his doubts; and Captain Johnstone of the "Camperdown" was blamed for not making fuller preparations for the collision which he anticipated. The Court and the Admiralty agreed that "The order and discipline maintained on board the 'Victoria,' up to the moment of her sinking, was in the highest degree honourable to all concerned, and

will ever remain a noble example to the service."

The distressing accident, bad as it was, might easily have been worse. The "Camperdown," with seven of her compartments filled with water, threatened to follow her leader, but the collision mat proved effective; the hole was closed temporarily, and the water pumped out. Next astern of the "Victoria" was the "Nile," Captain Noel, and next astern of the "Camperdown" was the "Edinburgh," Captain Brackenbury. It was solely due to

the presence of mind and skill of these two officers that their vessels were not involved in a double, if not a triple, disaster.

The collision gave rise to considerable controversy, as to whether the "Victoria" would not have escaped such dire injury if her armour had been extended to her bows. The Admiralty declared that even 16 or 18 inches of armour would have been no protection against the "Camperdown's" ram, whose point in any case would still have struck below the armour belt. Nevertheless, to the lay mind at least, it seemed that if there had been an extended armour belt, it would have discounted some of the force of the blow. Expert opinion decided otherwise, declaring that the saving of the ship depended upon the shutting of the watertight doors in the forward part of the ship. When the forward part sank so low that the deck slanted sharply downward, water poured in even by way of the upper-deck ventilators and the holes in the turret; which untoward happening would have overcome the stability of any vessel, however well constructed.

Although after the death of Gordon we ceased to prosecute operations against the Mahdists in the Eastern Sudan, Great Britain remained in military occupation of Egypt, and within but a few years we wrought a great change in the ancient kingdom. A United States diplomatist in Egypt thus testified: "The occupation has done vast good. . . . For half a dozen years Egypt has fairly bristled with prosperity. The story of that country's emergence from practical bankruptcy reads like a romance, and there is no better example of economical progress, through administrative reform, than is presented by Egypt under British rule."

In 1890 the Sirdar of the Egyptian army, Sir Francis Grenfell, resigned, and was succeeded by Sir Herbert Kitchener, who, while commander of Suakin, had trounced Osman's forces more than once. The Egyptian native army was now being coached and drilled under British officers, until there was no longer any fear that they would stand paralysed before the enemy, as when Osman Digna massacred them at El Teb. Up to 1896 our frontier post was at Wady Halfa. From this point Kitchener constructed the Sudan military railway southwards to the Atbara; and this was the deadliest weapon ever forged against the Khalifa Abdullah, who had succeeded the Mahdi.

Early in 1898 Kitchener was ready to commence operations against the 50,000 to 70,000 host of the Khalifa. The Anglo-Egyptian army consisted of 24,000 troops, of whom only one-third was British. The progress of the army was assisted by a river flotilla of half-a-dozen stern paddle-wheel steamers, which were commanded by officers of the Royal Navy. Commander Keppel, who was in chief command, had served as a sub-lieutenant under Beresford in the Gordon Relief Expedition of 1884-5. From the middle of July these boats were occupied in establishing depot

stores in advance; after August they engaged in transporting the greater portion of the army to Wad Hamid, saving a desert march that would have called for immense camel transport. On 26th February the Brigade left Abu Dis, and five days later it was beyond Berber. By 20th March it was moving along the Atbara, and having a first brush with the enemy's cavalry. "Fort Atbara." wrote Mr G. W. Steevens, "was the Portsmouth of the Nile. of Keppel's squadron always lay there, taking a week in its turn to rest and repair anything needful. The other two would be always up the river-one cruising off Shendi, and the other patrolling the 70 miles of river between. If necessary, the boats could run past Shendi, 40 miles more, to Shabluka, so that they acted as reconnoitring parties more than a hundred miles from the most advanced military post. . . . They were worth all the rest of the Intelligence Department put together. . . . Moreover, you may imagine that officers of Her Majesty's Navy did not confine their activity to looking on. . . . It was only by drilling a hole in the bottom of their boats and sinking them during the day, that the Dervishes could keep any craft to cross the river at all."

On 8th April, at Atbara, Kitchener won a great victory over Osman and Mahmud, another great Dervish general, who lost 3000 men slain and 4000 taken prisoner. Ten days later the railway reached Abeidieh, where three new screw gunboats, which had come out in parts, were fitted together. They were named "Malik," "Sheikh," and "Sultan"; they carried two 12½-pounder Maxim-Nordenfeldt quick-firers, fore and aft, with two Maxims on the upper deck, and one on a platform above. They were lightly armoured so as to be bullet-proof all over, while the screw was sunk in a protected well a few feet forward of the stern. As fighting machines they were better than the trio already in service, but for towing barges they were inferior, as they only drew 18 inches of water to the older boats 36 inches, which enabled the latter to make better headway against the full Nile.

By the middle of June railhead had reached Fort Atbara, and in the third week in August, the rear of the British Army had left Atbara behind for the final concentration at Gebel Royan. On the 26th the "Zafir," the flagship of the gunboat flotilla, sprang a leak off Shendi. Keppel headed her for the shore, but she sank when but a few yards from the bank, leaving only her funnel and mast above water. Although the naval men had been at work on the river for two years this was the first serious mishap. There were no lives lost, and Commander Keppel transferred his flag to the "Sultan."

Kerreri was shelled and occupied on the 31st. On the next day the army advanced, the gunboats pushing ahead to land a howitzer battery on the right bank, and then proceeded to shell the forts on either side. On 2nd September, at Omdurman, the Khalifa's army of 50,000 men was utterly routed. In the final stages of the expedi-



ONE OF KEPPEL'S SQUADRON ENGAGING A DERVISH FORT

tion the gunboats rendered the most efficient service. The enemy had taken their boats above the city for safety, but Keppel's squadron blazed its way past the forts and captured the craft. Really the Khalifa came out of Omdurman to give fight in the open largely owing to the vigorous shelling the city suffered from the gunboats and howitzers. Perhaps never was any force so wiped out as the Dervishes; II,000 were killed, I6,000 wounded, and 4000 captured. The remaining 20,000 were dispersed, recognising that they had made their last stand for Mahdism, and the evils for which it had stood so long.

Forty-eight hours later Gordon's remains had a tardy, but Christian burial. Under the Union Jack and the Egyptian flag, flying side by side, a native regimental band played the Khedivial Hymn; the Sirdar led in three cheers for the Queen; massed bands blared forth the strains of victory; and 21 guns banged to emphazise the general joy. Suddenly the jubilation changed to solemnity. The Guards were playing the "Dead March in Saul"; the minute guns boomed; a chaplain read the fifteenth Psalm; the British troops whispered the Lord's Prayer; the Scottish pipes wailed a dirge; and a Sudanese band played Gordon's favourite hymn, "Abide with me."

Mother Empire may be slow at times, but nevertheless she will not fail to maintain her honour. In this case fourteen lagging years had passed since Gordon kept his last vigil amid the fanatical hordes who thirsted for his blood. And the glamour of that sacred service in the black heart of the Dark Continent was flashed home by the electric spark; and Britons rejoiced that Gordon was avenged and the national credit restored.

In 1884, a British protectorate was established over a large area of territory around the Lower Niger. In 1897 the neighbouring country, called Benin, was ruled by a bloodthirsty despot, who revelled in fetish practices, which included human sacrifices of a particularly revolting character. On 2nd January Mr Phillips, the Acting Consul-General, eight other Englishmen, and some 200 native carriers, started on a mission to the king, concerning his obstacles to trade with the interior. On the 4th, the party was almost destroyed by musketry and the sword while passing through some thick bush. Only two Europeans escaped the slaughter, and for five days they lay wounded in the bush, until some friendly natives rescued them. All the massacred Europeans were beheaded, and Mr Phillips' finger-rings were sent back by the King of Benin in token of his exultation and defiance of British authority.

Rear-Admiral Sir Harry Rawson, in command of the Cape and West Coast Squadron, received orders to organise a naval expedition against Benin. There would have been delay in sending troops from home, and the wet season was approaching, and prompt measures were desirable in order to act as a caution to their native rulers in those benighted regions. The "Theseus," Captain C. Campbell, and the "Forte," Captain R. Foote, arrived on the west coast, together with a P. & O. steamer, which the Admiralty had chartered for an hospital ship, and in her came out 100 marines as a reinforcement. The Admiral, in the "St George," arrived at Brass



NAVAL BRIGADE IN THE BENIN COUNTRY

on 30th January, and in addition to the "Theseus" and "Forte," there were assembled the "Philomel," Captain O'Callaghan; "Phœbe," Captain Macgill; "Barrosa," Commander Startin; "Widgeon," Lieutenant-Commander Hunt; "Magpie," Lieutenant-Commander Elliot; and "Alecto," Lieutenant-Commander Pritchard. A naval brigade of about 800 men was at once organised, to which were added about 250 men of the Protectorate force, well provided with 7-pounders, Maxims, and rocket-tubes. The organisation and equipment were carried out by Captain C. le G.

Egerton, of H.M.S. "St George," Commander Bacon, of the "Theseus," acted as Intelligence Officer, for little was known of the country around Benin, and information had to be gathered in any way possible. For a portion of the route, river transport was available, and then there would be resort to native carriers to convey provisions, water, and ammunition through exceedingly difficult country.

The campaign, as planned, was for the main body to start from Warrigi on the Benin River, while a force under Captain O'Callaghan with the "Philomel," "Barrosa," and "Widgeon," was to take Guato on the creek of the same name; and a third party, 100 strong under Captain Macgill, with the "Alecto," was to secure a position near Sapoba, on the Jamieson River. The object of the two flank forces was to divert the enemy's attention from the principal attack, and also cut off escape to the east or west. By 8th February a base had been established at Warrigi, and a body of 250 Niger Coast Protectorate troops, under Lieutenant-Colonel

Bruce Hamilton, had made a road to Ceri.

The main body reached Warrigi on the 10th, under the command of Sir Harry Rawson, and the next day arrived at Ceri. Guato was taken with a loss of only four men wounded. At Sapoba a strong force of well-armed natives offered a stout resistance, but at length was driven back. In the attack on a stockade at this place Lieutenant-Commander Pritchard and one man were killed. The terrific heat, nearly 100 in the shade, caused a few deaths during the advance through the bush. On the 14th the march of 16 miles to Benin commenced, the enemy resisting from concealment the whole of the way. Cross Roads was occupied on the 15th, and an advance party, under Colonel Bruce Hamilton, had pushed on to Agagi. Nowhere in the neighbourhood of this place was there any water, and the carriers were in a state of exhaustion. Harry Rawson decided to go forward with a flying column of 560 officers and men with about 800 carriers, taking with them provisions for four days, and water for three. The column arrived at Agagi on the 16th, having had to endure the fire of the enemy as the force traversed a densely forested region.

Agagi was left the next morning, and on the afternoon of the following day the enemy was encountered in great force not far from Benin. A strong stockade, mounted with cannon, was breached by gun-cotton, and then carried at the point of the bayonet. Here Surgeon Fyfe, of the "St George," and three men were killed; several others were severely wounded, among them Captain Byrne of the Marines. A mile further on, the 7-pounders and the tubes sent their shells and rockets toward the city. When the whole force had closed up, it plunged into more thick bush until was reached a broad avenue leading into the city. Although the enemy, armed with breech-loaders, poured in a heavy fire from

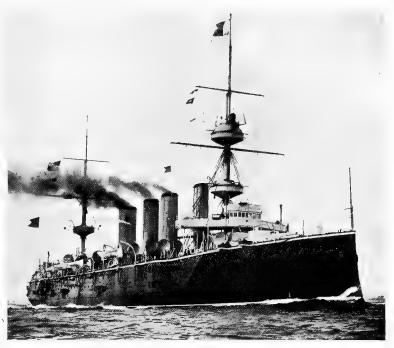
among the foliage of the trees and from the loop-holed houses, the British sailors and marines, and the Houssas of the Protectorate army, went into the city at the double, loudly cheering. The king had abandoned his compound and fled, and in a short time his followers had vanished. The whole place reeked with the blood and bodies of human sacrifices; it was one of the foulest dens of appalling superstition and fiendish cruelty that the mind could conceive. But the black spot was now to be wiped out, for Benin city was won from savagery to civilisation. The principal compounds, the fetish houses, and the crucifixion trees were destroyed, and, leaving a force of the Niger Protectorate troops to hold the place, the naval brigade returned to Warrigi. The punitive force was organised, and its object achieved, within the space of five weeks; and from first to last the expedition fully deserved the commendations that were bestowed upon the smart operations. For a time the King of Benin escaped capture, but in August he surrendered. He was taken in chains and exhibited in various towns in the surrounding territory, in order to convince those natives, who had refused to believe in the defeat of the erstwhile king.

When our great struggle with the Boers broke out in South Africa in October 1899, we had but few troops ready to take the field, and as our base was across 6000 miles of ocean, many weeks would elapse before a British Army could be landed. Within twenty-four hours of the outbreak of war, the Boers laid siege to Kimberley and Mafeking, and Natal was invaded. We gained apparent successes at Talana Hill and Elandslaagte, but our satisfaction was very short-lived. The Boers put into the field some guns of large calibre and long range from their forts at Pretoria and Johannesburg. The British field artillery was outranged and outmatched, and we were forced to vacate position after position, and within three weeks of the outbreak of hostilities Ladysmith was in danger from the enemy's heavy ordnance that had been installed on the encircling hills.

The British squadron in Simon's Bay was under the command of Rear-Admiral Sir Richard Harris. On 13th October he was requested to send to Cape Town two 12-pounder guns, with full crews of bluejackets, and as many marines as could be spared to form the gun escort of the naval brigade. That same day H.M.S. "Powerful" arrived (homeward bound from China), and the next day the "Terrible" (outward bound for China), entered the bay. On 20th October the brigade landed from H.M.S. "Doris" (flag), "Monarch," "Powerful," and "Terrible." It consisted of:—Commander A. P. Ethelston (H.M.S. "Powerful") in command; Major Plumbe, R.M.L.I., of the "Doris," second in command; 9 naval officers, 53 bluejackets, 7 marine officers, and 290 N.C.O.'s and men of the Royal Marines. The guns were two 12-pounder 8-cwt.

pieces, on ordinary field mountings. The destination of the brigade was Stormberg. This place, however, was evacuated at the end of the month, and the brigade returned to Simonstown on 19th November, having handed the two guns to the Royal Artillery. The men were bitterly disappointed at having had no chance of fighting, and correspondingly great was their joy to find that a new naval brigade was being organised to be attached to a column for the relief of Kimberley.

General Buller arrived at the Cape in November with 40,000



H.M.S. "POWERFUL"

men and II4 guns. The greater part of his force proceeded to the relief of Ladysmith; Lord Methuen would march on Kimberley with a column; General French was sent to recapture Colesberg; and General Gatacre aimed at Stormberg.

The naval brigade to join Lord Methuen's column was 400 strong, of all ranks, half being marines. The guns were 12-pounders, on special mountings designed by Captain Percy Scott, about which more will be said when we deal with the defence and relief of Ladysmith. The naval brigade joined Lord Methuen at Witteputs. It took part in the victory at Belmont on 23rd November, but did not have

much to do, beyond shelling the Boers at 1700 yards, making excellent practice.

In the succeeding battle of Graspan on 25th November, the naval men had a decidedly good show. The greater part of the brigade engaged in infantry work on the right. In a brilliant attack on the kopje held by the enemy, the blue jackets and marines, acting as a line of skirmishers, were met by a short-range cross fire. The officers lost heavily, Commander Ethelston, Major Plumbe, and Captain Senior were killed; Captain R. C. Prothero, R.N., and Lieutenant Jones were severely wounded; most of the petty officers and non-commissioned officers were killed or wounded. Yet the line never wavered as the steep ascent was climbed, the Boers maintaining a frontal fire until the naval men were only twenty-five yards from the crest. The men regretted that the enemy then trekked in desperate haste, for after their strenuous ascent they had looked forward eagerly to closing with them. The marines had lost two officers and 9 men killed, and I officer and 72 men wounded out of a total strength of 105. The blue jackets were not so subject to the cross-fire and suffered less severely, viz: 2 officers and 2 men killed, and I officer and 5 men wounded. Fifty bluejackets worked two 12-pounders on the extreme left. Although under a heavy shrapnel fire, they frequently put the Boer guns out of action for nearly half an hour at a time, and finally the Boer gunners abandoned their position. Here the naval men lost only six men wounded.

In attacking the heights of Graspan, Captain Prothero went into action with his walking-stick. As Admiral Harris remarked, "That may not be scientific warfare, but that is the way to encourage your men to come to the front." As he fell, the gallant officer yelled to his seamen to take the kopje "and be hanged to it." It was probably his leader's cool example that nerved 18-year-old Midshipman Huddart. "At the bottom of the hill he was hit in the arm; half-way up he was shot in the leg, but he still pressed on. On reaching the top of the kopje, he was shot through the stomach and fell, mortally wounded."

The next fight was at Modder River, where Lord Methuen was wounded. The next morning the enemy with their guns had gone, leaving evidence that they had suffered rather severely. Before moving on, Commander de Horsey of H.M.S. "Monarch" took over the command in Commander Ethelston's place; and shortly afterwards Captain Bearcroft, of H.M.S. "Philomel," arrived to take command of the Brigade; and the command of the marines was taken over by Major Urmston, R.M.L.I., H.M.S. "Powerful."

As the Boers were entrenching themselves at Magersfontein Lord Methuen applied for a 4.7 naval gun to be sent up from Simonstown. It arrived in due course, and every day treated the Boer trenches to lyddite and common shell. In the ensuing battle

Methuen received a severe check, his Highland brigade losing terribly. In this desperate encounter the 4.7 shelled the enemy's trenches at long range, but it would have taken half a dozen guns to keep down the enemy's fire. The four 12-pounders, with an escort wofully weak, were left on the south side of the river to protect a new bridge and the stores. After the defeat of the main force, the Boers were expected to attack this little naval party, but fortunately no attempt was made to take advantage of its isolation from the exhausted army.

For two months the Kimberley Relief Force halted on the Modder, awaiting reinforcements. A second 4.7 gun arrived, and for some time daily there was an exchange of shells with the enemy. In January a reconnaissance towards Jacobsdal was made, and some of our troops crossed into the Orange Free State for the first time. The blue-jackets had suffered so much from enteric, etc., that one of the 4.7's had to be handed over to the Royal Marine

Artillery, and immensely proud were the latter of it.

On 8th February Lord Roberts arrived, and matters commenced to be warm for the Boers. The South African Field Force invaded the Free State, and quickly Kimberley was relieved and Cronje was hurrying eastwards away from Magersfontein. Two more 4.7's, under Commander W. L. Grant of the "Doris," had been sent to the Modder, only to push on to Enslin and then to Jacobsdal, where the two 4.7's and two 12-pounder naval guns, left with Methuen's force, joined them. Lieutenant Dean with two 12-pounders was further ahead, joining in the chase after Cronjc. Omitting minor details, the next great event in the operations was the battle of Paardeburg, twenty-seven terribly hard miles being marched in twenty-two hours—no mean performance, especially bearing in mind that the guns were under way for two-thirds of the time over a heart-breaking route.

General Cronje was surrounded at Paardeburg, and after a week's vigorous bombardment and starvation he was forced to surrender. Thereafter there was no great amount of fighting in the march to Bloemfontein, and thence onwards to Pretoria, where

the British Flag was hoisted on 5th June 1900.

It was a sorry-looking naval brigade that entered the enemy's capital, for Captain Leslie Wilson says: "Among us all there was not a single suit of clothes that even a tramp would have condescended to accept as a gift. Our number was very small. We had lost very many officers and men since the start from Orange River, in action and from sickness, and all that remained at that time, at the front, were roughly 100 blue-jackets and 70 marines, with 10 R.N. and 4 marine officers."

The enemy having retreated eastwards, there were weeks spent in following them up, frequently coming into contact with them, but with no serious engagement except at Belfast. But always there was plenty of hard work and sometimes little reward for it—for example, an incident at Diamond Hill, which the enemy was holding with a big gun. On Sunday night, 10th June, the naval brigade set off in inky darkness in order to secure a position by daylight to assist in cutting off the Boers' retreat. It was a terribly tough march up a ridge that took three full hours. Morning light revealed the fact that the guns, whose extreme range was 9500 yards, were 11,000 yards from the enemy's position, so that the brigade could do little or nothing that day. During the succeeding night, however, they secured another position, some 4000 yards nearer to the Boers, whose sangars were made too hot for long occupation.

Early in October the First Naval Brigade for the relief of Kimberley returned to Simonstown, which was reached on the 12th, Grant's section, which had been operating north of Bloem-

fontein, having arrived almost a week earlier.

Now for a brief glance at Ladysmith, whose capture or surrender would have entailed most disastrous consequences; but as matters were going General Sir George White, with only light field artillery firing a 15-lb. shell at 6000 yards, would be unable to hold the place against the Boer 96-lb. shells, thrown by large mobile guns with an effective range of 12,000 yards. On 25th October Sir George White telegraphed to Admiral Harris: "The Boer guns are greatly outranging my guns. Can you let me have a few naval guns?" The Admiral replied in the affirmative, only to find that there were no field mountings for the 4.7-inch guns. Captain Percy Scott of the "Terrible" came to the rescue. By the afternoon of the next day special mountings were completed, and the "Powerful" left for Durban with two 4.7's and four 12-pounders. The Ladysmith Naval Brigade consisted of 17 officers and 267 men under Captain Hon. Hedworth Lambton. As the brigade left Simonstown, Captain Scott signalled to Captain Lambton: "I shall be disappointed if your two 4.7's are not mounted in Ladysmith in less than four days, and the Boers sent to Hades with lyddite. Hope to see you soon with some more guns."

The brigade arrived at Ladysmith just in the nick of time, and speedily got to work; for even as the train steamed into the station the Boer shells were screaming over the line. Three 12-pounders were unloaded. The troops defending the town on the right were retiring and the three naval guns joined them, and soon came under a heavy fire from a Long Tom. One bursting shell overturned a 12-pounder, knocking a wheel off the carriage and wounding all the gun's crew, and stampeding the draught oxen and native drivers. Amid the smoke and dust galloped Captain Lambton to ask if the crew had deserted the gun. "All badly wounded, sir," replied the gunner. "Good," was the answer, "that is better than running away." While the disabled gun was being remounted and brought in, the two other 12-pounders opened fire with common



A 4.7-INCH GUN AND BLUE-JACKETS AT LADYSMITH

shell on the Boer position, at 7000 yards range. The third shot "knocked out" the enemy's gun for the rest of the day.

The arrival of the blue-jackets with their guns had an immense moral effect in Ladysmith; it heartened the troops and allayed any panic among the inhabitants. Outside, the effect was equally great, for no longer could the Boers dominate the town with shells to which there was no effective reply. Forty-eight hours after Captain Lambton's arrival Ladysmith closed its doors to the outside world—and they were to remain closed for II9 days. The great feature of the assistance lent by the naval men to the military was the transformation of what hitherto had been considered immobile guns into mobile field guns. Such heavy ordnance had been used only on board ships, where the mountings could be secured to iron decks, or in forts where they could be concreted down. The following is Captain Scott's description of the method of mounting: "It consisted of four pieces of timber, 14 feet long by 12 inches, placed in the form of a cross. On to the centre of this was placed the ordinary ship's mounting, bolted through to a plate beneath. The pedestal and timbers were thus all securely bolted together. Next, the gun-carriage was dropped over the spindle. and secured down by its clip-plate. It was found that it was not even necessary to fill in round the timbers with earth; on firing, a slight jump of the platform, of course, took place, but this in itself was an advantage, as it relieved the strain."

In the earlier days of the siege the 4.7's fired between 20 and 30 rounds daily, but as the ammunition was limited, sometimes a gun would not be fired for a week at a time. On November the 2nd, the first day of the siege, Lieutenant Egerton, the gunnery officer, was killed. While he was directing the fire of a 4.7 within a sandbag redoubt, a 6-inch shell from a Boer Long Tom entered and shattered both his legs. All he said was, "This will put a stop to my cricket, I'm afraid," after which he lit a cigarette. The men idolised their "Gunnery Jack," and his conduct in such-a devastating moment showed almost superhuman coolness.

Sir Arthur Conan Doyle wrote: "But for the invaluable naval guns, the besieged must have lain impotent under the muzzles of the Creusots... when every hill, north and south, east and west, flashed and smoked and the great 96-lb. shells groaned and screamed over the town, it was to the long thin 4.7's, and to the hearty, bearded men who worked them, that soldiers and townsfolk looked for help. These guns of Lambton's . . . if they could not save, they could at least hit back, and punishment is not so bad to bear when one is giving as well as receiving."

The naval brigade, however, could do more than merely hit back, as was shown in the various hot attacks on Ladysmith, especially that of 6th January 1900. Not only was the fire of the enemy's siege guns kept down, but a party of blue-jackets gallantly assisted

the military, when the enemy had got right up to the gun parapets on Wagon Hill. Meantime General Buller was pushing on to the relief of Ladysmith, and with him was a naval brigade consisting of 285 officers and men under Captain E. P. Jones of the "Forte"; Commander A. H. Limpus of the "Terrible" was second-in-command. No less than 217 of the men were from the "Terrible"; the rest were "Tartars," who manned a couple of 12-pounders. The guns were two 4.7's and fourteen long-range 12-pounders. At Frere this force was joined by 53 petty officers and men of the Natal Naval Volunteers. On the lines of communication there were two 12-pounders at Estcourt, manned by 26 officers and men of the "Philomel," under Lieutenant Halsey; and two at Mooi River manned by 25 officers and men of the "Forte," under Lieutenant Steele. Whole chapters easily could be devoted to the slowly won positions on the route to Ladysmith. From Estcourt to Frere; the bombardment of the enemy's trenches at Colenso; the fierce battle at this last named place where eleven pieces of artillery were lost; the attempt of the Hon. F. H. S. Roberts. Captain Congreve and Corporal Nurse to bring in the guns; the winning of the V.C. by each of the trio, although the son of the gallant Commander-in-chief did not survive his wounds to receive it: the operations at Spion Kop and Vaal Krantz; the sending up of a 6-inch naval gun; the capture of the Tugela Heights; and the final relief of Ladysmith—for particulars of these movements. with their cheering successes, alternating with heart-breaking disappointments, the reader must look to annals solely devoted to the South African War.

We may find room for mention of a few special examples of the nonchalance of seamen under fire in Natal, to match those quoted in connection with the brigade with General Methuen. When the naval guns were retired at Colenso, Seaman White, dangerously wounded in the back from a piece of shell, was left lying on the field. Young Seaman Campling elected to remain with his chum until an ambulance party removed him to the rear. Later, Campling himself was reported missing. He turned up later, however. Stimulated with the battle glow, he had gone into the firing line with the Queen's, and only at the end of the disastrous action did he return to his own contingent.

When the retreat was ordered, another seaman either failed to understand it, or, what was more likely, saw no particular reason for it. Being at a loose end at the moment, he picked up a rifle and an ammunition pouch, and then sought a convenient cover at a useful range for shooting. Not until after it was dark did he rejoin his mates. His pouch was empty, stomach ditto, and he was very weary; but he was very satisfied with himself, and averred that he had "not had such a day, not for a long time." Upon all occasions the men of the naval brigade worthily upheld the great

reputation of the Service, working most harmoniously with the military, from whom they won the most heartfelt encomiums. We will conclude with a brief review of the final operations before Ladysmith. By February the 25th nearly all the naval guns, 4.7's and 12-pounders, were in position in Hlangwani, from which they engaged the enemy's guns on the 27th, while Kitchener's troops were taking Railway Hill.

Says Captain Limpus: "Then the guns redoubled their efforts, the shell-bursts seemed almost continuous, lyddite and shrapnel throwing up earth and stones at each trench. . . . We felt that the Boers must be crushed down by shell fire, and that our men must be helped all we knew. . . . A few of Kitchener's men then rose and charged forward splendidly. In a moment the whole lot rushed forward; the other guns ceased, but two naval 4.7's and four 12-pounders went on as hard as they could. . . . At last our men were up, our shell fire swept round up Terrace Hill, and on Railway Hill the bayonets got to work, and this hill and its adjoining neck were ours. Terrace Hill was similarly taken. . . . We felt, we saw that the Boers were really beaten. . . . Darkness fell amid preparations for going on, and we felt that the battle, which decided Ladysmith's fate, had now been fought—and won—and that, too, on Majuba Day."

The naval gunnery at all times and all places was excellent, but never better than on this day. Captain Jones, in a despatch, said: "A man from the "Philomel," Patrick Casham, was the captain of the gun, and a born shot. . . . At least ten different guns always claim to have put some gun out of action. Through the glass I saw this gun put three lyddite shells in one minute into the embrasure of a gun on the Grobler; the gun never fired again, nor were the wheels visible afterwards, though I had previously seen them distinctly (range, 9000 yards)."

On the evening of the 28th Lord Dundonald entered Ladysmith with mounted troops, and its long vigil was at an end. On 3rd March the 4.7's were sent into the town by train, whither the naval brigade trekked with the 12-pounders. On the 7th the "Powerfuls" started for the coast to rejoin their ship, homeward bound; and on the 11th followed the "Terribles" to Durban, to rejoin ship.

Another detachment of 60 men from the "Terrible" had been in Zululand with two field guns to protect the province against Boer raiders. This force also returned to the ship, as did Captain Scott, who had been acting as Commandant of Durban. On 27th March the "Terrible" left Durban for China, where the guns that had relieved Ladysmith would find more work awaiting them.

The "Powerful" returned to England, where the officers and men had a most enthusiastic reception. The Prince of Wales (afterwards King Edward VII) inspected them; Queen Victoria

invited them to Windsor Castle that she might personally welcome them home. At the review on the Horse Guards Parade, Lord Goschen, First Lord of the Admiralty, addressed to the "Powerfuls" words that were a tribute to the whole of the naval men engaged in South Africa:

"You have come back to your country with the sense that you have done your duty as became the representatives of the Royal Navy, called to fight on shore. You have not only had your baptism of fire, but most of you have been under fire for months, by night and day. With your comrades in other forces of the Queen, by the defence and the relief of Ladysmith you have saved the country from such a disaster as has never befallen British arms. The defence and relief of Ladysmith will never be forgotten in British story. But you came back with gaps in your ranks, dear shipmates left behind in honoured graves. You of the 'Powerful' lost your young gallant commander, Ethelston, and Lieutenant Egerton, your gunnery lieutenant, to whose training you owe so much of that fine shooting which has been the admiration of the Army at whose side you fought. And one word to the Marines. We have heard of your gallantry when at Graspan Major Plumbe fell mortally wounded, and how you dashed to the top of the kopje, undaunted by the terrible sight of your comrades falling in heaps around you as you made for victory. I am proud to stand here and address such a body of men as we have inspected to-day. You have nobly upheld the traditions of the Service. We are proud of those who have gone before you, and in their turn your sons, if you have them, or when you have them, will be proud of you."

It must be remembered that the work of the brigades was only the outward and visible sign of our naval strength at sea. If our fleet had not been all-powerful, there would have been interference by one or more Continental powers, with an assured European war as the result. But Britain's enemies knew that our Navy was fully prepared to meet all emergencies, and thus during our land opera-

tions we were assured of the neutrality of the world.

The outcome of the South African War was the addition of 165,000 square miles of territory to the British crown at a cost of over 200 millions sterling war expenditure, with 22,550 men killed and missing, and nearly 6000 invalided out of the Service. Empiremaking calls for the footing of heavy bills, but never before so expensive a reckoning as that with which we commenced the twentieth century.

In the spring of 1900 an anti-foreign agitation broke out in Northern China. Apparently the trouble originated in a secret society known as the I-ho-chüan, or Patriotic Harmony Fists, but there was no doubt that the movement met with approval in high quarters, which was borne out when Chinese Imperial

troops joined the "Boxers," and thus converted a badly armed mob into a more or less well-equipped army. The provinces of Shantung and Shan-si in particular were the scenes of ferocious massacres of Christians, in which Europeans and natives suffered alike; quite 200 Europeans lost their lives, but the native converts perished in thousands.

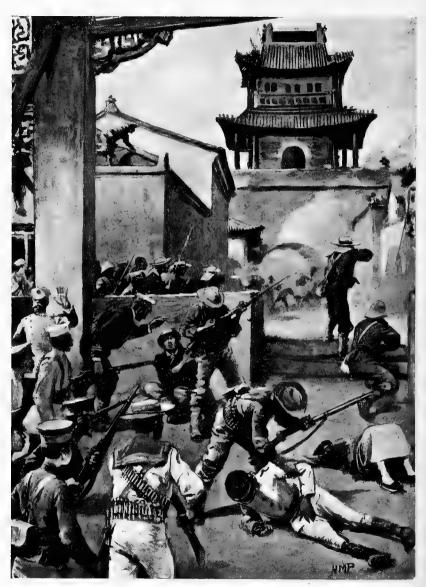
On 31st May an international force was summoned to Peking to guard the Foreign Legations, and a smaller contingent, under Captain Bayly of the "Aurora," was sent to garrison the Tientsin Concession. These prompt measures were the salvation of the foreign communities, for it was beyond doubt that the Boxers had planned a wholesale massacre of Europeans that would have put the atrocities of 1870 in the shade. The combined International Legation Guards in Peking numbered 20 officers and about 400 men. Of this force British marines formed nearly one-fourth, under Captains Strouts, Halliday, and Wray; the remainder was supplied by France, Germany, Russia, America, and Japan. There were nearly a thousand foreign residents in the city, and from these 150 volunteers were enrolled to render military service. The situation speedily became critical, for scarcely had the International Guards arrived than the railway was destroyed and communication with the outside world was cut off, save for a few messages that trickled through by means of faithful native messengers.

The Legations were menaced on all sides, and it needed the most skilful disposition of the defenders to keep the cordon intact. On 11th June the Chancellor of the Japanese Legation was murdered by Chinese soldiers as he rode through the streets. On the night following there was a great slaughter of Chinese Christians. add to the general horror the Boxers fired the dwellings of their victims, which resulted in a larger conflagration than the rebels anticipated, and a considerable portion of the city was destroyed. Two days later an attack was made on the foreign pickets, who gave the Boxers a warm reception. As the massacre of the Chinese Christians still continued, Captain Halliday led out a party of British and German marines, who brought several hundred native refugees into the Legation Quarter; and eventually about 3000 distressed converts were rescued and placed in the grounds of Prince Sü, adjacent to the British Legation. Immediately after the allied admirals had deemed it necessary to capture the Taku forts, the Chinese authorities in Peking notified the Foreign Ministers that they must leave the capital within twenty-four hours, accompanied by the promise of safe escort to the coast. The Ministers wisely decided to remain in the Legations and defend them to the last, or until relief arrived. The Chinese mounted guns on the city walls and shelled the foreign quarter, and constantly buildings were set on fire in the hope that the flames would spread to the Legations. On 24th June Captain Halliday headed about 30 marines in a brilliant sortie, in which the Chinese were driven back with the loss of considerable arms and ammunition. For distinguished bravery upon this occasion Captain Halliday was awarded the Victoria Cross. The enemy's pertinacity was unbounded, and an attack was next made upon the palace and grounds of Prince Sü, where the native Christians were sheltered. The palace was set on fire, but the Japanese contingent repulsed the attack with marked gallantry. Next, the French Legation quarter was hotly assailed, and a portion of it gained by the enemy. On 20th June the British Legation suffered from seventy shells, until Captain Wray, with British, German, and Russian marines, caused the offensive gun to be withdrawn.

While the allied admirals were assembled off Taku, a message was received on 9th June from the British Minister at Peking, asking for an immediate advance to be made to the capital, or it would be too late. An international naval brigade was promptly formed, consisting of men drawn from the various vessels, together with a portion of the force already guarding the Tientsin Concession. The total strength available was 2090 officers and men, consisting of 900 British, 500 Germans, 312 Russians, 150 French, and fewer each of Italians, Austrians, Americans, and Japanese. Captain John Jellicoe was in command of the British contingent, and Admiral Edward Seymour was the commander-in-chief of the whole expeditionary force which left Tientsin on 10th June.

The railway was in good order as far as Lofa, 30 miles on the way to Peking, but from that point the line needed constant repairs, and progress was made only by fighting day and night against ever-increasing numbers of the enemy. It was soon apparent that the force was not of sufficient strength to achieve its object, and Sir Edward Seymour reluctantly turned back. Fierce fighting marked the return journey, and at one stage the internationals were without food or ammunition until they captured supplies from the Boxers. As Tientsin was neared, a force of 1600 men, chiefly Russians, came to Seymour's assistance, and the Concession was gained after an absence of sixteen days. The international losses were nearly 300 killed and wounded; the British lost 27 killed and 97 wounded, Captain Jellicoe being one of the latter.

Sir Edward Seymour had scarcely set out from Tientsin when it was painfully apparent to Captain Bayly that his garrison was all too weak to withstand the horde of Boxers and Chinese regulars that was ready to come to the attack. A mixed reinforcement of 2000 men was sent up from Taku, among them Lieutenant Drummond, R.N., of the "Terrible," with 100 blue-jackets and marines, the latter under Captain Mullins. One of the "Terrible's" 12-pounders, on its field carriage, was a useful adjunct, that shortly justified its presence by damaging the biggest Krupp gun that the Chinese regulars had brought up. After his abortive attempt to



THE FINAL ATTACK ON TIENTSIN

relieve Peking Sir Edward Seymour decided that the native city of Tientsin must be captured before making another effort to succour the Legations. Three more 12-pounders from the "Terrible" arrived, and in the strenuous fighting that occurred daily until 12th July the blue-jackets and marines from the "Terrible," "Barfleur," "Aurora," and "Orlando" well upheld the traditions of the Service. During an attack upon one of the Chinese batteries Commander David Beatty of the "Barfleur" was wounded. On 13th July the native city was subjected to a fierce bombardment. The Chinese fought stubbornly, but after the Japanese contingent had blown up the outer gate, the enemy decided that further resistance was useless, and on the 14th the Allies secured the city at a cost of about 800 killed and wounded.

Meanwhile day after day the gallant defenders of the Legations kept the enemy at bay in Peking. Captain Wray was wounded on 1st July, and Captain Strouts was killed on the 16th. A week later the Boxers made furious assaults on the Roman Catholic Cathedral, where several thousand native Christians were under the protection of a hundred French and Italian marines. During the remainder of the month the enemy's activity slackened, but the besieged were in a parlous condition owing to scarcity of food, ammunition, and medical necessaries. But relief was at hand. On 10th August native runners got through with letters from the British and Japanese generals; and on the 14th one of the most thrilling sieges in modern history came to an end. The relief of the Legations was a military operation, but a naval brigade was attached to General Gaselee's army; Captain G. A. Callaghan, of the "Endymion" was in charge of 400 officers and men with four 12-pounders and two 4.7's from the "Terrible."

CHAPTER XXV

OUR TWENTIETH CENTURY FLEET

BATTLESHIPS

In the old days of wooden warships a three-decker cost only about £100,000, and usually she was cheap at the price, especially if she rendered nearly half a century's service, as did the famous "Victory." When the "Formidable" class appeared in 1898, costing about £1,000,000 each, the British taxpayer felt assured that we had at length reached finality in expensiveness; only to find that new battleships constantly increased in size, while the cost went up by leaps and bounds. Nowadays £2,500,000 is near the figure for the addition of one single monster to our fleet, or more than the cost of the whole of the 27 ships-of-the-line with

which Nelson won the battle of Trafalgar.

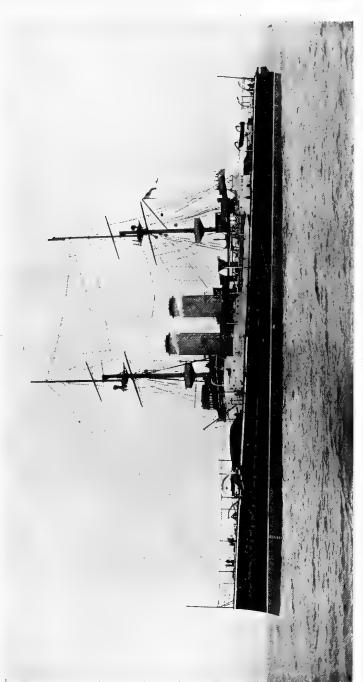
In the first year of the twentieth century we launched five ships of the "Duncan" class, the others being the "Albemarle," "Cornwallis," "Exmouth," and "Russell." Their dimensions were:—425 feet by 75.5 feet by 26.5 feet; displacement, 14,000 tons. In size these vessels were less than their immediate predecessors, but they were the fastest battleships that we had yet produced, their speeds ranging from 18.6 to 19.3 knots. In the case of the "Ocean" class, it had been objected that only 6 inches of armour at the waterline was insufficient in view of the power of modern guns, and the fact that warships now carried a secondary armament of 7-inch and 8-inch quick-firers. In the "Duncan" class, consequently, the water-line armour was increased to 7 inches.

In 1904 the "Swiftsure" and "Triumph" were added to the fleet. As their displacement was only 11,800 tons, it might seem that we were reverting to smaller ships, instead of continuing the upward tendency. In this case, however, the vessels were built, the "Swiftsure" at Elswick, and the "Triumph" at Barrow, for the Chilian Government, who had been anticipating war with Argentina. King Edward VII arbitrated between the two countries, with the result that their dispute was settled amicably. Chili then having no particular use for the new ironclads, allowed the British Government to take them over from the builders. These vessels of



(After a photograph by Cribbs H.M.S. "MONARCH" FIRING A GRESCENDO BROADSHIP OF TEN 13 5 IN GUNS- PROJECTILES EACH 1,250 LBS.





H.M.S. "RUSSELL"

smaller tonnage, like the "Barfleur," "Centurion" and "Renown," and the "Canopus" class, are useful as flagships on foreign stations; in particular they meet the need of special cases that arise from time to time when it is necessary to despatch ships with speed to the East via the Suez Canal, whereas bigger ships cannot pass from the Mediterranean to the Red Sea with equal facility. But the "Swiftsure" and "Triumph" possessed features that made them equal to armoured cruisers. Their dimensions were:—450 feet by 71



H.M.S. "HINDUSTAN"

feet by 24.5 feet. It will be seen that these ships were decidedly long. The boilers supplied steam to triple-expansion engines indicating 12,500 horse-power, and giving a speed of 20 knots. Their armament consisted of two 10 inch guns at each end, and fourteen 7.5-inch guns on two decks, all well protected.

The "King Edward VII" class, completed in 1905-6, consisted of the typical vessel named, and the "Dominion," "Commonwealth," "New Zealand," "Hindustan," "Hibernia," "Britannia," and "Africa." Being of 16,350 tons displacement, they were the biggest ships yet added to the Navy;—length, 453 feet; beam, 78 feet; depth, 26.75 feet. Although they were shorter than the

"Swiftsure," they were 28 feet longer than the "Duncan" class. Their engines of 18,000 horse-power gave them a speed of 19 knots. The "King Edwards" showed a marked attempt to give better protection and more destructive weapons, in order to compete with the increasing power and range of naval guns. 12-inch guns, hitherto, had been considered sufficient for attacking the portion of a vessel most heavily armoured, while 6-inch guns could play havoc with the thinner plating and gun shields. But improved methods of manufacture were giving the medium armour additional resisting power, so that the projectiles of 6-inch guns (100-lb. shells) broke up on the extra hard surface of the improved plate. These vessels, therefore, were given an armour belt that gradually increased from 7-inch thickness on the upper deck to 9-inch on the water-line, while the barbettes were protected by 12-inch armour; and as they also had the usual protective deck and citadel amidships, they were thus more completely armoured than any ships that preceded them. The armament consisted of four 12-inch guns in pairs in the two barbettes; four 9.2-inch guns mounted singly in casemates on the upper deck, two on each side above the 6-inch battery, so that two could fire right ahead and two astern; ten 6-inch guns, five on either side of the main deck, and all mounted in casemates; and in addition there were more than twenty smaller weapons. In these ships the fighting top was abandoned. Henceforth the tops became only fire-control stations, from which the range of a distant enemy can be observed and particulars telephoned to the guns below.

A few words may now be devoted to the subject of boilers. The early box-pattern boilers were little more than huge kettles fired from the outside, but eventually there came into use cylindrical boilers with cylindrical furnaces and flues, which yielded a greatly increased pressure. The "Scotch" boiler, in addition to the furnaces, has a number of fire tubes through which pass the hot gases from the fires on their way to the funnel. As the water lies around these tubes, steam is got up more quickly and maintained better than in a boiler without them. Increased pressure, as great as 220 lbs. per square inch, enabled compound engines to be installed. The "Scotch" boiler for a long time was the type used for our naval vessels, and it still remains supreme in locomotive practice and in the mercantile marine.

The principle of the "water-tube" boiler is practically the reverse of the "Scotch," for here the water is in the tubes themselves, and the flames play directly around them. By this method steam is raised even more speedily, and a 300-lb. pressure can be carried with safety. On the other hand the water-tube boiler calls for more attention, and it is more expensive in upkeep. The Belleville water-tube boiler, which came into use in the French Navy in 1879, was adopted for British warships in the early 'nineties. About ten years ago a special committee was engaged to investigate and

report upon the subject of boilers. It was agreed that water-tube boilers were undoubtedly best for naval purposes; but that the Yarrow and the Babcock & Wilcox types were most suitable for

use in our battleships and cruisers.

At the Diamond Jubilee Naval Review in 1897 there appeared a little craft of 44 tons, with engines developing 2000 horse-power, that darted about among the monster warships at the rate of an ordinary express train. This was the "Turbinia," equipped with steam turbines that were to mark a new era in steam navigation. In proof that there is nothing new under the sun, it may be said that the turbine is only a scientific development of an apparatus with which Hero of Alexandria experimented more than 2000 years The chief feature of the turbine engine is a cylindrical box containing a spindle mounted with a number of metal discs, which have vanes set slantingly at their circumference. Steam being admitted to the cylinder, it acts upon the vanes in something like the same manner that wind acts upon the sail vanes of a mill, or the buckets of a wheel forced round by water. The vanes and wheels increase in size from the point where steam is admitted, and as it expands the steam is able to exert its force on a greater surface; and steam, entering the cylinder at a pressure of about 200 lbs. per square inch, leaves it at a speed of about three-quarters of a mile per second. The turbine engine is less in weight than the ordinary reciprocating engine, and requires fewer boilers, for it is not a question of increased steam consumption, but only a matter of extracting all possible velocity from the steam that is generated. Another advantage claimed for the turbine is the reduction of the vibration that is incidental to all steam-driven vessels at a high speed. Vibration has an ill effect on the machinery, and if a rough sea lifts a propeller out of the water it "races," and causes great strain on the engines. In a turbine-driven vessel the propellers are set obliquely and deeper in the water, so that there is no racing, and consequently no loss of speed even in a rough sea. The turbine speedily aroused attention, and in 1905 we find the "Victorian," a passenger steamer of 10,000 tons, and the first turbine vessel to cross the Atlantic, beating the Canadian record between Moville and Cape Race by about twenty hours. By that time the Admiralty was experimenting with turbine ships to ascertain the value of the new aid to speed as applied to warships.

Two notable battleships were launched in 1906, the "Agamemnon," built at Govan, and the "Lord Nelson," at Jarrow. Although they were 33 feet shorter than the "King Edwards," they were of slightly greater beam and draught, and displaced 16,500 tons. The "Agamemnon" was equipped with Yarrow water-tube boilers, which supplied steam for two-screw engines, indicating 20,000 horse-power, giving a trial speed of 183 knots. The "Lord Nelson" was given Babcock & Wilcox boilers, indicating 20,000

horse-power, and affording a speed of 18.9 knots. The armour of these ships consisted of a complete belt along the water-line, from stem to stern, 12 inches thick amidships, diminishing to 4 inches at the bow, and 4 inches aft; the sides above the belt and between the barbettes carried 12-inch armour up to the level of the upper deck; and the citadel was enclosed with diagonal bulkheads of 8-inch armour. As showing the improvement in armour-plate, this 8-inch thickness was declared to be equivalent to the 12-inch of only four years earlier. The armament given to the "Agamemnon" and "Lord Nelson" was really formidable. First there were the usual four 12-inch guns, which claimed to be half as powerful again as any previous guns of that calibre. The 9.2-inch guns were increased to ten in number, as against four in the "King Edwards." These were placed in twin barbettes, one on each side, fore and aft, of the central citadel; while a central barbette on each side carried a single gun. There were no 6-inch guns, but the armament was completed with twenty-four 12-pounders and 5 torpedo tubes.

On 2nd October 1905 a new warship was laid down at Portsmouth. As no official statement had been made to show that there was anything out of the way in contemplation, the newspapers devoted the shortest of paragraphs to the announcement. A few months later the vessel was launched, and in one day under the twelve months the "Dreadnought" was completed and ready for her trials. Never before had a battleship been laid down and completed within a year. Only then did the naval experts of foreign nations learn that Great Britain had stolen a march on them. She was in possession of a battleship that put every warship affoat out of date, and that was more than a match for any two or three of the most powerful ships that could be pitted against her. No such mammoth battleship had ever been seen, as shown by her dimensions:—length, 490 feet; beam, 82 feet; depth, 26.5 feet; displacement, 17,900 tons. She was 40 feet longer than the "Swiftsure" and "Triumph," hitherto our longest war vessels, and 1400 tons heavier than the "Agamemnon" and "Lord Nelson." In her turbine engines she showed absolutely a new departure in the propulsion of battleships. Hitherto only a 3000-ton cruiser had been fitted with the new engines. In order to give her sea-going qualities and to increase the command of her forward guns, a forecastle was provided, giving the ship a free-board forward of 28 feet. or higher than had been given to any modern battleship. The main armoured belt had a maximum thickness of II inches of hardened steel, tapering to 6 inches at the forward and 4 inches at the after extremity of the vessel; the redoubt armour varied in thickness from 11 inches to 8 inches; the turrets and fore conning tower were II inches thick, and the after conning tower 8 inches. The protective deck varied from 1\frac{3}{4} inches to 2\frac{3}{4} inches in thickness. Special

H.M.S. "LORD NELSON"

attention was given to safeguarding the ship from destruction by

under-water explosion.

But the outstanding feature of the "Dreadnought" was her armament, which had come to revolutionise the world's navies by abolishing the universal practice of a mixed armament of heavy and light guns, and substituting a greater number of the most powerful weapons known. No battleship hitherto had carried more than four 12-inch guns, but the main battery of the new vessel consisted of ten of these great weapons. While it is recognised that a powerful broadside fire is absolutely essential in a battleship, all-round fire is considered to be of great importance, since it lies in the power of an enemy to force an opponent, who is anxious to engage, to fight an end-on action. In the arrangement of armament adopted six of the guns were mounted in pairs on the centre line of the ship, the remaining four guns being mounted in pairs on the broadside. Eight guns-80 per cent. of the main armament-can be fired on either broadside; and six of the guns—60 per cent. of the main armament—can be fired simultaneously ahead or astern. For use against torpedo craft the vessel was equipped with twentyseven 12-pounder quick-firers of greater power than those hitherto used for the purpose. Immense interest was taken in the trials of the "Dreadnought,"

which cost nearly \$\frac{1}{2}.000,000\$. She proved to steer and handle well, and at all speeds there was an absence of vibration. Her engines, developing 23,500 horse-power, gave a speed of 21.5 knots; and for three hours she maintained a speed of 22.4 knots. The new vessel thus outstripped any other in the world in power and speed. As each of the 12-inch guns fired a projectile of 850 lbs., the total weight of a broadside was 6800 lbs. It had been suggested that the concussion of eight of these huge guns fired simultaneously would injure the structure of the ship. When fired with a full charge, each gun develops a force capable of lifting the "Dreadnought" bodily nearly three feet in the air, or in technical language, the gun exerts a force of 47,697 foot tons. The projectile was capable of piercing 51 inches of wrought iron at the muzzle, or 14 inches of Krupp steel at 6000 yards. The guns came through their tests splendidly. In a salvo of eight the concussion was terrifying, but the yessel stood the shock well, suffering no damage except a few

the blast dangerous, thanks to the great length of the guns allowing the muzzles to be quite clear of the ship's sides.

The "Dreadnought" was Great Britain's challenge to the nations, which they were not slow to take up, but in the never-ceasing race to produce the acme of effectiveness, we had secured an invaluable lead; and with our wealth and shipbuilding resources we might be expected to see to it that we did not forgo our advantage.

broken port-lights, and a little injury to lighter fittings; nor was

While our foreign rivals were setting to work to build vessels on

WINDING WIRE ON A 12-INCH GUN



somewhat similar lines, new British ships were showing a considerable advance, as seen in the "Superb," "Téméraire," and "Bellerophon," which were launched in 1907. These vessels measured 18,600 tons, but otherwise were practically of the same dimensions as the "Dreadnought." They were followed in 1908 by the "Collingwood," "St Vincent," and "Vanguard," of increased dimensions:—500 feet by 84 feet by 27 feet; displacement, 19,250 tons. In all six of these vessels the ten 12-inch guns formed the principal feature of the armament, but in the first three the 12-pounders gave way to sixteen 4-inch guns throwing a projectile of 35 lbs.; and in the last three there were eighteen of these pieces. This strengthening of the supplementary armament was due to the increased size of torpedo craft.

The "Neptune," 19,900 tons, and the "Colossus" and "Hercules," each 20,000 tons, and all three equipped with ten 12-inch guns, may be dismissed with simply noting the upward

tendency of the displacement.

The "Orion" appeared in 1910, closely followed by the "Conqueror," "Monarch," and "Thunderer." In size these vessels surpassed all their predecessors; 545 feet by 88 feet by 27.5 feet; displacement, 22,500 tons. They were thus each 55 feet longer and 4600 tons more displacement than the original "Dreadnought." Their armament showed a new departure, the ten 12-inch guns giving place to an equal number of 13.5-inch guns. The guns were in pairs in five barbettes along the centre line of the ship, so arranged that all could be fired on either broadside. The second pair is raised to fire above the first pair, and the fourth pair raised to fire above the fifth; and thus four guns can be fired either ahead or astern. As the projectile of the 13.5-inch 75-ton gun is 1250 lbs., the weight of metal discharged in a single broadside is 12,500 lbs., or nearly double that of the "Dreadnought." Compare this gun with the 5-ton gun that was installed on the "Warrior," our first ironclad. The old gun would pierce 3-foot of wrought iron at 3000 yards, whereas the 13.5-inch gun will pierce 5 feet of the same material, or 26 inches of the finest modern armour. During the "Orion's" gun-trials the concussion of a broadside was so tremendous that windows were shattered at a distance of 12 miles; and it was reported that the noise was heard 40 miles away. Like all battleships that have followed the "Dreadnought," the "Orion" and her sisters were equipped with turbine engines, driving four shafts and screws. The indicated horse-power of 27,000 gave a speed of 21 knots. The coal bunkers had a capacity of 2700 tons; but if necessary the vessel could also carry 1000 tons of oil in her doublebottom tanks. Taking into account their increased size and the armament of heavier guns, these vessels might almost be said to have inaugurated a new type of battleship, as signified by the term Super-Dreadnought, to distinguish them from their ten predecessors.

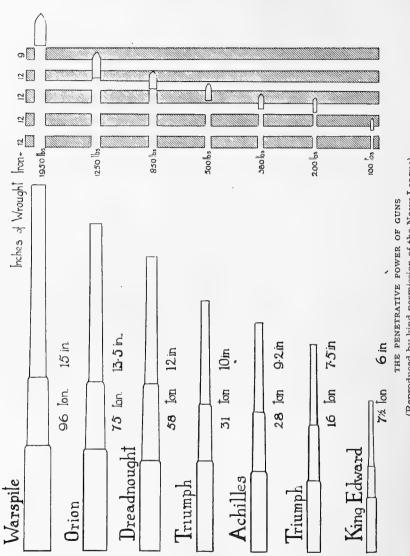
H.M.S. " VANGUARD "

The next quartette of battleships, the "King George V," "Audacious," "Ajax," and "Centurion," were completed in 1913. They were slightly bigger than the "Orion" class, but the armament was the same, except that the torpedo tubes were increased from three to five. Four vessels of the "Iron Duke" class. due for completion in 1914, showed a marked increase in length (580 feet), and the tonnage rose to 25,000. They carried the ten 13.5-inch guns as in their predecessors, but instead of sixteen 4-inch guns, they were given twelve of 6-inch for their anti-torpedo battery, as the 4-inch weapon would be practically useless against the improved torpedo craft, whose latest types were bigger and much more effective. These ships, too, were equipped with a couple of 3-inch guns, specially mounted for operation against offensive aircraft. The "Iron Duke" cost £2,081,000. Although even Germany, the most pertinacious of our naval rivals, yet possessed no battleship carrying guns heavier than the 12-inch, the British Admiralty proceeded to lay down the "Queen Elizabeth" class of five vessels markedly in advance in various respects of our last Super-Dreadnoughts. The length increased to 620 feet, and the tonnage to 27,500, and their speed of 25 knots is dependent upon oil for steamraising instead of coal. Some of the advantages of oil fuel are quite obvious. Taking up less space than a corresponding quantity of coal, liquid fuel increases the radius of action of the ship. As the oil is pumped and sprayed into the furnaces men are relieved of the task of shovelling coal. A ship that burns coal must return to port to replenish her bunkers, which is a tedious operation even under the best conditions, whereas oil is taken aboard from the storage tanks ashore by means of pipes, that practically obviate labour. More than this. A ship need not return to port for oil. A tank steamer can take it to her, and when a pipe connection is made, pumps do the rest. Of course under necessity a ship can coal at sea, but it is difficult, and in bad weather dangerous, to transfer coal from one ship to another, which is why our Navy possesses only one collier, viz., the "Mercedes," a vessel of 10,000 tons.

But the "Queen Elizabeth" and her sisters mark a notable advance in naval armament in that the ten 13.5-inch guns give place to eight of 15-inch. Speaking of this new weapon the First Lord of the Admiralty informed Parliament that it was the best gun we have ever had, reproducing all the virtues of the 13.5 on a large scale, and was the most accurate weapon ever introduced into the service. Whereas the 13.5-inch gun hurls a 1250-lb. projectile, the 15-inch gun fires a shell of 1950 lbs., and can throw this immense mass of metal a distance of ten to twelve miles. That is to say, there was an increase of rather more than 30 per cent. in the weight of the projectile for an addition of $1\frac{1}{2}$ inches to the calibre. The increase in the capacity of the shell produces results in greater proportion in its explosive



H.M.S. "ORION," SHOWING THE STERN BARBETTES AND FOUR 13.5-INCH GUNS



(Reproduced by kind permission of the Navy League)

power, and the high explosive charge which the 15-inch gun can carry through and get inside the thickest armour afloat is very nearly half as large again as was the charge in the 13.5-inch gun. It may be remarked that the new gun is 56 feet 3 inches long, and weighs 96 tons, and it can be fired six times in five minutes. The accompanying illustration graphically indicates the capabilities of modern guns. The "Queen Elizabeth" and "Warspite" were due for completion in October 1914, but the "Barham," "Malaya," and "Valiant" would not be ready for their trials until the spring of 1915 at the earliest. The naval designer recognises no



H.M.S. "LEVIATHAN"

such word as "finality," for long before the "Queen Elizabeth" appeared, the "Royal Sovereign" class was on the stocks. There are five of these vessels, each 29,000 tons, and 44,000 horse-power; they are coal-burners with a speed of 22.5 knots, and their 15-inch guns are increased to ten.

CRUISERS

At the beginning of the century the "Cressy" class represented the best type of our first-class armoured cruisers. These were followed in due course by new vessels, but all of them of greater speed. In 1902-3 the four ships of the "Drake" class were completed. They were named "Drake," "Leviathan," "King

Alfred," and "Good Hope." Their dimensions were:—520 feet by 71 feet by 26 feet; displacement, 14,100 tons; speed, 24 knots. Their main armament consisted of two 9.2 inch guns, and sixteen 6-inch guns. Nine ships of the "Mammoth" class were completed in 1903-4. These were smaller craft of 9800 tons displacement, but their engines indicated 22,000 horse-power, and gave a speed of 23½ knots. The "Devonshire" class of seven vessels displaced 10,850 tons and had a speed of 22½ knots. Instead of fourteen 6-inch guns, as in the last class, the "Devonshire" and her sisters were given four 7.5-inch guns, and six of 6-inch. The "Duke of Edinburgh" typified the next half-dozen of armoured cruisers, with a displacement raised to 13,550 tons. The main armament was increased to six 9.2-inch guns, and four of 7.5-inch. In 1908-9 were launched the three ships of the "Minotaur" class, of 14,600

tons displacement, and speed 23 knots.

From this time the first-class armoured cruiser developed more on battleship lines, and to the succeeding vessels was given the title of battle cruisers. Three notable ships of this type were completed in 1908-9, viz., the "Invincible," "Indomitable," and "Inflexible." Their displacement rose to 17,250 tons; their dimensions were: -530 feet by 78.5 feet by 26 feet; and their engines, developing 41,000 horse-power, gave the astonishing speed of 25 knots. These were the Dreadnought cruisers to which were given eight 12-inch guns and sixteen of 4-inch. It will be perceived that the armament of these cruisers was more powerful than that of any battleship previous to the end of the year 1905. Until the appearance of these new ships, it was not difficult to define the duties of a cruiser, the chief of which was reconnaissance work; she was not designed for fighting except against ships of about her own type, for, owing to her extreme mobility, she could show her heels to any battleship, and thus avoid an unequal contest. But a vessel like the "Indomitable" "could steam round a fleet of pre-Dreadnought battleships, and fire when it suited her, keeping beyond the range which would enable the old battleship guns to penetrate the armour of the modern cruiser." With the latest armoured cruisers, in addition to their powerful armament, they possess that extra mobility that enables them to force a battle, or decline it except on their own terms.

The speed capabilities of H.M.S. "Indomitable" were shown in August 1908, when His Majesty the King (then Prince of Wales) was returning from the tercentenary fêtes on the Heights of Abraham. She crossed from Quebec to Cowes within five days. From land to land she occupied less than three days, compassing 1700 miles in 67 hours. This brings us to another phase of the question. Various fast Atlantic liners, such as the "Lusitania" and "Mauretania," have been built partly by Government subsidies, and in time of need they are at the disposal of the Admiralty. In



H.M.S. "INFLEXIBLE"



H.M.S. "AUSTRALIA

war-time ocean greyhounds of this type could bring to the Mother-land immense cargoes of wheat and other food-stuffs. With their speed of 25 knots, no battleship afloat could overtake them. It will, however, occur even to the least unimaginative person that the enemy need not necessarily be in the rear, and it would be serious if the greyhound encountered the foe face to face. The liners have been built with a view to being mounted with serviceable guns, but more than that, in their voyages between the Old and the New Worlds, they would be accompanied by battle cruisers that would be able to keep up with the liners in speed, and at the same time, by means of their powerful armaments, would be able to shield their charges from harm.

In 1911 was completed the "Indefatigable," 25 feet longer than the "Indomitables," and with a displacement of 18,750 tons; 45,000 horse-power; speed, 26 knots. Two very similar ships were the "Australia" and "New Zealand," which were contributed to the Navy by the Colonies whose names they bear. This necessitated the battleship "New Zealand," one of the "King

Edward " class, being renamed ("Zealandia").

The "Princess Royal" and "Lion," that followed, were bigger (26,350 tons), faster, and more powerfully armed than any preceding cruisers. The first-named, built at Barrow, was the biggest British warship ever turned out of a private yard. She was launched on the same day as the battleship "Conqueror," of which she was a cruiser copy. Both "Conqueror" and "Princess Royal" were armed with the same class of gun, viz., 13.5-inch, the battleship having ten of these weapons and the cruiser eight. cruiser was of the same beam as the battleship, but she was II5 feet longer, the additional length being necessary to give her the desired extra speed; and for the same reason the cruiser's side armour was 2 inches less in thickness. The "Conqueror's" turbine engines (27,000 horse-power) gave a speed of 21 knots; but 70,000 horse-power was necessary for the "Princess Royal" to steam at 31 knots. The next couple of cruisers that appeared, the "Queen Mary" and "Tiger," rose to 27,000 tons displacement, and their engines indicated 80,000 horse-power; but their main armament showed no change from the previous couple.

The big cruisers that have just been described, while speedy enough to fulfil the old-time functions of a frigate, are armoured and armed to such a degree that they would render efficient service in a line of battle. But the cruiser family includes types only lightly armoured or even wholly without armour, but a cruiser of any kind is generally furnished with a protective deck. In addition to reconnaissance duties, the larger unarmed cruisers in time of war would engage largely in the task of commerce destroying; they would range the seas, preying on the enemy's merchant ships. As many vessels in the mercantile marine, and especially mail

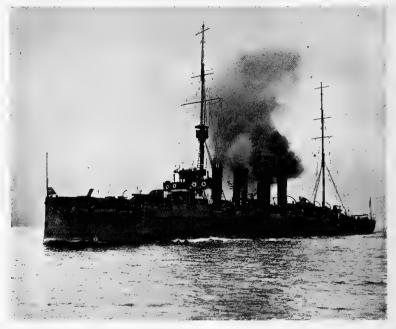


THE BAITLE CRUISER "PRINCESS ROYAL," BUILT BY MESSRS VICKERS, LID., AT BARROW

steamers, are of high speed, the cruisers would be useless unless they were fast enough to overtake them.

The "Powerful" and "Terrible," launched in 1895, and

described on page 496, were the largest protected cruisers (14,200 tons). In 1902 was completed the "Spartiate," the last of a batch of eight. These were of 11,000 tons displacement, and a speed of 21 knots. As a matter of fact the first-class protected cruiser ceased to occupy an important place in the Admiralty scheme



H M S. "BRISTOL"

of naval warfare, her place being taken largely by the torpedo-boat destroyer. At the time of writing only some eighteen of what were first-class protected cruisers remain in the active list, and these are occupied in very ordinary ocean police and patrol work, such as the enforcement of the international fishing agreements, training and instructional duties, etc. As our possessions are world-wide, and our mercantile marine trades in and out of every port in the world, it is necessary for our warships to "show the flag" in many a sea, where an armoured ship is not called for; and consequently we have a large number of smaller protected cruisers of the second and third class. When the five vessels of the "Bristol" class appeared in 1910, they represented the

Admiralty's last word in protected cruisers of moderate size (4800 tons), and with a speed of 25 knots; they were armed with two 6-inch and ten 4-inch guns. The "Weymouth" class followed in 1911; these vessels were of generally similar build to the "Bristols," but their armament was increased to eight 6-inch guns. In 1912 the "Chatham" heralded a new class, of which the "Birmingham" was the last to be completed in 1914. Little was it dreamt how speedily this vessel was to justify her existence. Her encounter with a German submarine is depicted on coloured Plate VIII, and described on page 642.

The third-class protected cruisers, such as the "Topaze" class, differ from the second-class only in being smaller and more lightly armed. They are engined powerfully in proportion to their tonnage, and consequently attain a good speed. It is, however, difficult to obtain high sea-keeping speed in small steamers. The "Boadicea" and similar vessels, of from 3000 to 3500 tons, and speed 25 knots, for a time represented the best of the unarmoured cruisers. They are employed chiefly for despatch duties. One of this class was the "Amphion," which was sunk by a German mine

on 6th August 1914.

For scouting we built the "Sentinel" class of seven vessels, one of which was the "Pathfinder," that came to an untimely end by submarine attack on 5th September 1914. These were completed in 1905. They range from 2700 to 3000 tons each, and are equipped with engines developing 16,000 horse-power to give a speed of 25 knots; but to maintain this rate even for a short time involves a tremendous consumption of coal. It follows naturally that the armament can be only of the lightest, such as would be requisite for fighting against similar kinds of craft. The work of the scout class is vedette duty, observing the enemy's battleships and conveying tidings to the fighting ships of the scout's own side. Should the motive power fail, the scout would fall an easy prey to the battleship or armoured cruiser, but with her ten 12-pounder quick-firers she would be able to offer a stout resistance to smaller craft.

The latest type of cruiser is described as "light-armoured," and by August 1914 a score of them had been provided for, and the "Arethusa," the first of her class, was already on active service. Really these vessels are not intended for ordinary cruiser duties. The First Lord of the Admiralty has defined them as "destroyer destroyers," and asserted that they were "the smallest, cheapest, and fastest vessels, protected by vertical armour, ever projected for the British Navy. They will be strong enough and fast enough to overhaul and cut down any torpedo-boat destroyer afloat." Their displacement is about 3500 tons; they use oil fuel; speed, 30 knots. The armament consists of two 6-inch and six 4-inch guns.

TORPEDOES AND TORPEDO CRAFT

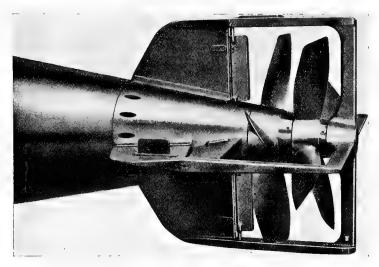
While naval designers were racking their brains to provide warships with metal jackets that would resist the missiles fired from more and more effective guns, it was always recognised that a vessel's weakest part lay below the water-line; and inventors pertinaciously sought means to attack a ship at the point where it was most vulnerable.

On page 460 there is a reference to an internal machine such as the Russians used considerably during the Crimean War. The commonest form was an iron vessel more or less in the shape of a truncated cone, which was charged with from one to two cwts, of gunpowder, to which was attached a fuse consisting of certain chemicals. When a ship came into contact with a machine, the chemicals were released, causing the gunpowder to explode, with disastrous results to the vessel. An apparatus of this description is now classed among the engines of destruction that are known as submarine mines, of which there are various kinds, used chiefly for river and harbour defence. In modern practice mines are laid in the waterways leading into harbours; and they are fired by electrical means by an operator on shore, who has only to depress a button on a switchboard to blow to atoms any vessel that is passing over a mine. So complete is our system of harbour protection by mines, that no naval commander affoat would dare risk a ship amid a network of terribly destructive entanglements, controlled from a properly protected station ashore. The subject of mines receives further consideration in later pages.

In the case of submarine mines the ship has to come to the machine that is meant to destroy it; and the next great step was to provide some means of making the mine mobile, so that at will it could be directed against a hostile vessel. The spar-torpedo was one of the means adopted to attain that end. The explosive charge was fixed to the end of a long spar, which projected over the bows of a small steam launch. An electric wire led from within the boat to the charge, and when, under cover of night, the launch reached the ship that was to be attacked, the spar was dipped, and the charge exploded below the water. In the American Civil War the "Albemarle" was blown up by a spar-torpedo, but the violent explosion also destroyed the launch, and the gallant officer who was in charge of the operation only escaped by being a powerful swimmer.

From these crude beginnings the present-day torpedo took its rise. The machine is named after a species of fish, which is equipped with the power of emitting at will electrical shocks of considerable intensity. By means of this unusual power the torpedo, or electric ray, defends itself against foes, and benumbs the active fish upon which it feeds. There were various more or less successful attempts to produce a serviceable naval torpedo, but all of them were put in

the shade in 1868 by the invention of Mr Robert Whitehead, an English engineer resident in Austria, who developed his wonderful steel missile from the preliminary invention of Captain Luppis, an Austrian officer. In 1864 the last-named designed a fire-boat loaded with explosives, which were fired by a pistol connected with an overhanging spar for striking the vessel attacked. The motive power of the fire-boat was a screw driven by clockwork. From this machine Whitehead evolved an iron boat containing several pounds of dynamite, the craft being able to travel a short distance under water at a speed of about six knots. A few years later (1870) the apparatus took the form of the torpedo, with an increase of range



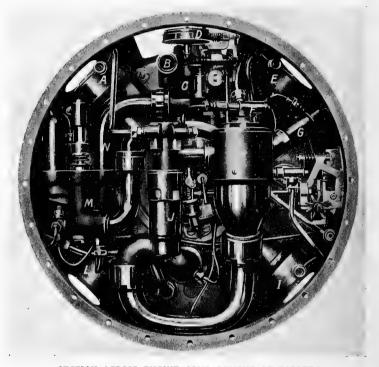
STERN OF TORPEDO SHOWING PROPELLERS AND RUDDERS

to 400 yards, a speed of 8 knots, and a charge of about 70 lbs. of

gun-cotton.

The modern Whitehead torpedo, commonly known as the automobile torpedo, is self-propelling, moving through the water by self-contained power. In appearance it is a strong steel, cigar-shaped cylinder, from 14 to 21 inches in diameter and from 17 to 24 feet in length. The body of the torpedo is divided into several compartments. In the front is the explosive head, containing gun-cotton, provided with a percussion fuse, by which it is exploded when it strikes the side of a hostile ship. The main body of the cylinder is filled with compressed air, forced into it by powerful air-pumps, until a pressure of 1350 lbs. per square inch is obtained. Behind the air chamber is the driving mechanism, consisting of wonderfully compact little engines, which only a few

years ago drove the twin screws at a speed of 28 knots for 2000 yards, or 34 knots for 1000 yards. The compressed air is soon exhausted, but by the introduction of an apparatus for heating the air, increased power and speed are obtained. The heater is extremely small, simple, and burns any ordinary lamp oil, and it is capable of being fitted to any practical type of torpedo. The British Admiralty has always promptly adopted all available improvements



SECTION ACROSS ENGINE COMPARTMENT OF TORPEDO

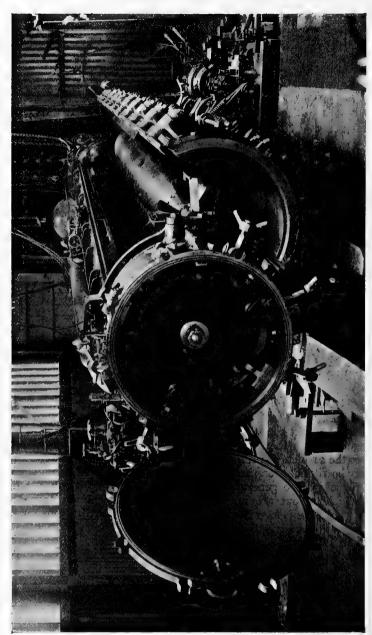
in torpedo armament, and for years we have led in the matter of submarine tubes for firing the weapons.

Within the body of the torpedo there are various ingenious contrivances for balancing and for directing its course at a uniform depth below the surface of the water, and also for causing it to rise to the surface if the missile misses the object at which it is aimed. The torpedo is discharged by means of a tube, and by the time the screws are in the water they are revolving at full speed. The missile can be discharged from above the water-line, but more generally the tube is below it. If a vessel were in action it would be extremely dangerous to attempt to discharge a torpedo from a tube above

the water, lest it should be struck by one of the enemy's shells. In all large vessels, such as battleships and cruisers, torpedoes can be discharged from flats deep down in the hull below the waterline, and safeguarded by the protective deck and the coal bunkers.

The introduction of the air-heating apparatus quickly gave us torpedoes that would travel 1000 yards at 40 knots, 2000 yards at 37 knots, and 4000 yards at 27 knots. By the year 1911, however, still further improvements had been effected, as shown by the following remarks of a well-known naval expert in discussing the new 21-inch Whitehead torpedo, with which H.M.S. "Orion" had been equipped. "The weight of the explosive, alone, carried in the head of her 21-inch torpedo, will be quite 20 per cent. more than the weight of gun-cotton carried in the head of the 18-inch torpedoes of her immediate predecessor, the 'Neptune.' The speed of the new weapon is quite to per cent. better over its whole range than the speed of the 18-inch Whitehead; while the effective range of the larger weapon is nearly 50 per cent. better than the smaller torpedo to be carried by the 'Neptune.' The naval service now has three Whitehead torpedoes in use, whose diameters are 14-inch, 18-inch, and 21-inch respectively. Their war heads carry 85, 205, and 250 lbs. of gun-cotton respectively. The 14-inch torpedo is now only carried for boat use in the larger ships, and as the torpedo equipment of the older and smaller torpedo craft. An effective range of 7000 yards, which is claimed for the 21-inch weapon, will cause a battle fleet to be even more careful than it has been in lighting up the horizon for torpedo craft by searchlights at night. To bring searchlights into play would only disclose the whereabouts of the fleet, and make the ships targets for this prodigious torpedo to be launched at, from a distance that would render the attacking torpedo vessels quite immune from gun-fire, since no present searchlights are powerful enough to light up an attacking flotilla at anything over half the range at which the 21-inch Whitehead can be used. This is what gives the 21-inch torpedo such an advantage, as a weapon of attack, over the 18-inch weapon."

Warships are generally provided with heavy steel nets, which can be hung out around the ship to defeat attack by torpedoes. Their chief use is for when a vessel is at anchor, but the nets may be employed even when she is under way, although with a great reduction in speed. Torpedo netting forms a cumbersome load, and in reality is little protection against the special cutter which can be attached to the torpedo, whose velocity would enable it to cut through the strongest net ever devised. The only real safeguard against the Whitehead torpedo is to keep outside its effective range. Accurate gun-fire directed upon the vessel which carries and discharges torpedoes is an immensely better defence than any passive, protective nets. Of course torpedo attack is conducted by stealth and dash, and chiefly under cover of darkness, and hence the necessity



SIDE-LOADING-A TORPEDO IN ITS TUBE

for powerful searchlights to detect the approach of the enemy, in order to direct upon her the fire of the numerous small guns with which big ships are provided for that special purpose; but, as already pointed out, the increased active range of the torpedo has very largely discounted searchlight protection.

TORPEDO BOATS

The natural corollary to the invention of the torpedo was the appearance of the torpedo boat, specially constructed to carry and discharge the new weapon. The first real torpedo boat built for the British Navy was the "Lightning," which Mr Thornycroft constructed in 1876. She was 87 feet in length, displaced 28½ tons, and had a speed of 18½ knots. Small boats cannot keep the sea, but the mission of the torpedo boat is chiefly harbour and coast defence work. If employed with a fleet it necessitates a "parent ship," to which the torpedo boat can go for repairs, etc. In 1889 we launched the "Vulcan," 6620 tons, which could carry half a dozen torpedo boats on her deck in readiness to assist the fleet when called upon. For hoisting torpedo boats in or out, the parent ship was equipped with two powerful hydraulic cranes. Several other "parent ships" have been launched at intervals during recent years. Torpedo boats have increased in size, and now range from 125 to 185 feet in length; 308 tons displacement; speed, 26 knots. Their armament is two 12-pounders, and three torpedo tubes. There are thirty-six of these boats; all are turbined oil burners.

TORPEDO BOAT DESTROYERS

The torpedo boat gave rise to the torpedo boat destroyer, a seagoing craft that appealed more to the British Admiralty than the torpedo boat, which is more suitable for acting on the defensive than would be our naval policy in war-time. Hence we designed the destroyer, which could carry on torpedo warfare against big warships, and at the same time be so superior in speed and armament to torpedo boats, as to be able to destroy them as well. Except, perhaps, the protected cruiser, there is no type of modern warship that has undergone more stages of development than the destroyer. It made its first appearance in the early 'nineties. More than a dozen were launched in 1894, only one of them displacing more than 300 tons; and by 1901 our largest destroyer was only 470 tons, and that was quite exceptional. Since then the size has shown an upward tendency, as will be seen by reference to the list in the Appendix.

The "River" or "E" class, thirty-two in number, and all named after English rivers, were launched in 1903-5. These boats



A REMARKABLE PHOTOGRAPH OF A TORPEDO ENTERING THE WATER AFTER LEAVING AN ABOVE-WAIER TUBE

displaced from 500 to 600 tons, and their speeds varied from 25½ to 27 knots. They were armed with one 12-pounder quick-firer, five smaller guns, and two torpedo tubes. Although these vessels were the biggest destroyers we had floated, their speed was less than their predecessors. Considering their purpose, this laid the new vessels open to criticism on that score, but on the other hand they could claim to be better sea-going boats. They could keep the sea and maintain a good speed even in heavy seas, whereas some of the acknowledged faster craft had to slow down.

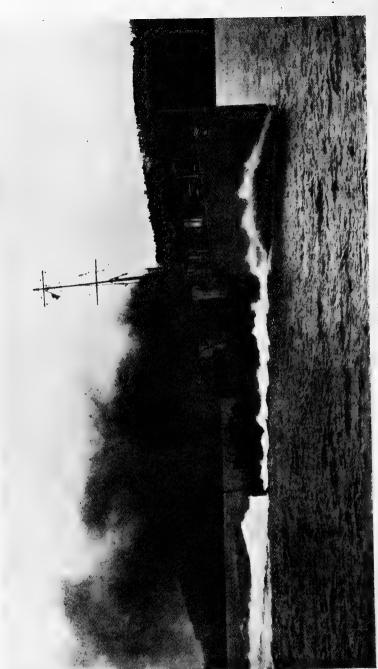
The "Tribal" or "F" class consisted of destroyers still larger, and all of them could attain about 33 knots, which was considerably in excess of anything that had appeared earlier. The smallest of the dozen was the "Afridi": 250 feet by 25 feet by 7.6 feet; displacement, 795 tons; she was also the lowest in speed, viz., 32\frac{3}{4} knots. Of the others, half a dozen were each 280 feet in length, and measured over 900 tons, the "Viking" reaching 1090 tons. They were all fitted with turbine engines, and all were oil fuel burners. The "Mohawk" could do 34.5 knots, and the "Tartar" 35.6 knots. The last-named could keep up that terrific speed for six hours, and was easily the fastest ship in the world. The armament of the "Tribal" class was two 4-inch guns and two torpedo tubes for half of them, and three 12-pounders for each of the other half dozen.

The "Swift," which was completed in 1910, was a notable destroyer in various respects. She was built by Messrs Cammell, Laird & Co., and cost more than a quarter of a million pounds sterling. Measuring 2170 tons, she was equal in displacement to any two destroyers in the Fleet; her chief dimensions were: 345 feet by 34 feet by 10.5 feet. Burning oil fuel, her engines of 30,000 horse-power gave a speed of 36 knots. Her armament consisted of four 4-inch guns and two torpedo tubes. She is now

employed as a flotilla leader.

Later additions to the destroyer fleet were known as "Coastal" destroyers. In the years 1909-10 appeared a score of the "G" class, commencing with the "Basilisk" and ending with the "Wolverine," if we take them alphabetically. Their designed displacement was 950 tons, and speed 27 knots. They were all of them triple-screw turbine boats, and all of them coal burners. The "Acorn" ("H") and "Acheron" ("I") classes of 1910-11, each of twenty vessels, were of 780 tons displacement, and speed 27 to 32 knots. The whole forty were fitted for burning oil fuel, and all of them were able to keep at sea regardless of weather. For the latest classes the reader must turn to the Appendix.

Before leaving the subject of torpedo boats and destroyers, one ought to give a thought to the officers and men, who lead hard lives in navigating these very necessary craft. The lightly-built hull is subject to incessant vibration when running at extreme speed; and the living quarters are so cribbed that there is scarcely room



DESTROYER "PHŒNIX" OF THE "I" CLASS AT FULL SPEED

even for the simplest furniture. As the free-board is very low the deck is practically under water in anything approaching a heavy sea, and guns, searchlight apparatus, etc., are usually enveloped in tarpaulin covers. Mr Arnold White draws a vivid picture of life aboard torpedo craft in winter time. "During heavy weather cooking is impossible. It is the custom for the officers to lash a cooked ham to one of the funnel stays so that any one needing food in a gale may cut a slice to eat with his ration of bread or biscuit. On a destroyer fifty-seven men are cooped up in a sleeping space so small that no County Council or Municipal Authority ashore would permit paupers or criminals to occupy it."

SUBMARINE BOATS

The submarine boat is a torpedo boat or destroyer, able to navigate and fight under water. Although this type of vessel had long passed the experimental stage, its value in actual warfare had yet to be proved; but some of the greatest naval experts of the day did not hesitate to assert that the submarine had practically

discounted the most modern of our battleships.

Although it is only within very recent years that the submarine has come forcibly to the front, it is by no means a new idea. In the year 1802 Lord Stanhope spoke in the House of Lords concerning the inventions of an American in France. We were at war with the French at the time, and French writers were boasting that shortly they would be in possession of a flotilla of diving boats, armed with infernal machines, that would play havoc with the keels of our blockading squadron. The terrible inventor was Robert Fulton, a native of the United States, who had been associated in England at one time with James Watt and various Englishmen interested in steam navigation; and at a later period Fulton caused America to take a decided lead in the matter of steamships.

In July 1801, in the harbour of Brest, Fulton indeed did descend in his new diving boat to a depth of 25 feet; and after various experimental descents he contrived to keep below the surface of the water for a period of over four hours. Next he experimented with his torpedoes, and blew an anchored hulk to atoms. He hoped to try his invention against a British ship, but was never afforded an opportunity. Finally the British Government succeeded in getting Fulton to transfer his allegiance from France to Britain, and in October 1805 he essayed to destroy part of a French fleet that lay at Boulogne. Upon this occasion he made no use of his diving boat, but only launched torpedoes against the enemy; but the only result was that the missiles exploded too soon, and the French ships escaped with little or no injury. Just as Napoleon had tired of Fulton's unsuccessful experiments, so the British Government

appeared to have relinquished any hope of the diving boat or the

torpedo being put to any practical purpose.

It was not until the end of the nineteenth century that France and the United States took up the subject of submarine boats very seriously, and each was in possession of several more or less successful submersible boats, while yet we had made no progress in the matter. Nowadays no nation with any pretensions to a navy can disregard war engines of such terrible potency as the submarine boat, and before the end of 1914 Great Britain possessed nearly a hundred.

Some years ago Mr Alan Burgovne predicted that we should some day see a submersible armoured ship of 1000 tons, carrying guns with which to attack surface torpedo craft, and a complete battery of tubes from which to launch torpedoes at battleships and cruisers. In 1908-11 was launched the "D" class of eight boats, of 580 tons, and speed 153 knots awash, and 10 knots when submerged. D4 and succeeding boats were each equipped with a 12-pounder quick-firing gun, which disappears when the vessel is about to descend. The "E" class, launched 1912-13, rose to 800 tons displacement, and mounted two 12-pounder guns. It is, of course, not politic to disclose full details of vessels whose main work is conducted under the cover of secrecy, but it may be said that the new "F" class built in 1913-14 displace 1000 tons, and are armed with two 12-pounders and six torpedo tubes. With the constant increase in size, submarines have improved in their sea-keeping capacities. Abundant proof of this fact was given in 1913, when two vessels of the "E" class voyaged 13,000 miles to Australia, not only of their own power, but absolutely without the convoy of any ordinary war vessels.

We must leave the illustration to take the place of any lengthy description of submarine boats. These naval diving ducks are propelled on the surface by gasoline engines; for propulsion under water electricity is supplied from accumulators. To submerge the boat water is let in through valves which communicate with the double bottom of the vessel; and thus the weight of the water admitted overcomes the buoyancy, and the boat sinks below the surface. When the water is expelled the submarine rises to the surface again. There are rudders for both vertical and horizontal steering. The boat is supplied with a store of compressed air sufficient to maintain the crew in comfort for six hours. features of the submarine when on the surface are the conning tower, a circular tube of steel, with 4-inch armour, and the periscope. This latter consists of lenses arranged upon a long tube, the top of which is above water, although the vessel is out of sight. The lenses reflect images from above the surface downwards through the tube on to a table within the vessel, or to a mirror in front of the helms-When even the periscope is submerged the crew can see nothing of their surroundings beyond shadows of any large objects,

SUBMARINE B4

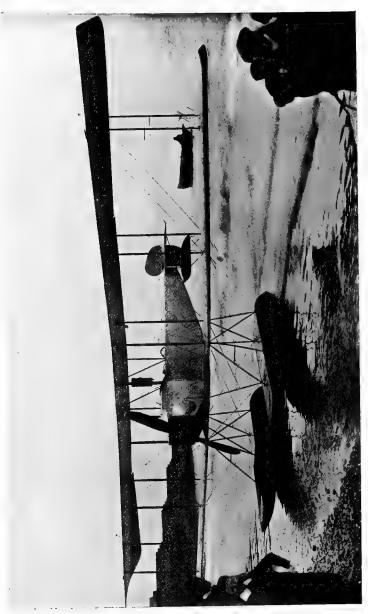
which may show through the glass lights that are fixed round the upper edge of the conning tower. In Chapter XXVIII are described various recent naval actions that pointedly illustrate the deadly capabilities of the submarine.

NAVAL AIRCRAFT

One of the greatest modern marvels of man's inventiveness is the aeroplane, which has accomplished the conquest of the air. It was only in 1903 that the brothers Wright made the first really successful flight at Dayton in Ohio. Nowadays quite long flights are an everyday occurrence; even as one writes a machine passes quite low down over the house on its way from Hendon to Paris: and arrangements are being pushed forward for a flight across the Atlantic. As the aeroplane cannot mount into the air until it has attained a certain speed in running along the ground, it did not seem probable that the machine would lend itself to marine work. But aerial engineers have produced the hydroplane, or waterplane. that can not only fly in the air, but can float upon water. flying powers are concerned they are identical in the aeroplane and waterplane; but underneath the latter there is an arrangement of floats that will allow it to rest upon the water, and vet so shaped that they may be driven rapidly through the water, until the machine has attained sufficient speed to rise into the air.

It was not until the early part of IgII that four naval officers commenced a course of instruction in aeroplane flight. years later the Navy possessed 150 qualified pilots, 60 seaplanes, and about 40 aeroplanes that needed only the provision of floats to fit them for naval work. In March 1914 the First Lord (Mr Winston Churchill) said in the House of Commons: "We rely for the security of our east coast from raids very largely upon the patrol flotillas (of destroyers and submarines) which are grouped together at strategic points, and which can be summoned and directed to any point where an attempted landing by an enemy is being made. No assistance can be more valuable than the assistance rendered by aeroplanes and seaplanes in bringing this information, in regard to which time is vital, to the bases where our patrol flotillas are held in readiness. Of course, the heavy seaplanes which we are developing now will carry formidable explosives, which could be dropped on to transports, and disturb the landing even before the patrol flotillas could arrive. The seaplanes fly by night as well as by day. They can carry wireless telegraphy, enabling them to signal 120 miles effectively, and they have recently even been able to receive a message while in the air." It is an interesting fact that shortly after this statement was made the First Lord himself qualified as an air pilot.

Enormous as have been the changes in warships since the introduction of steam and iron, and especially during the last quarter of



AN "AVRO" WATERPLANE

a century, it is practically safe to prophesy that the coming twenty-five years will witness even more striking developments. The torpedo, as delivered from the submarine, is undoubtedly a prime factor in naval warfare; and particularly when the missile will be controlled and directed with deadly accuracy by wireless telegraphy. Here aircraft came in to rob the submarine of a small proportion of its terrors. Although a submersible is quite invisible to a battle-ship, even at close quarters, it can be detected with comparative ease by an aeroplane up above it, for it is possible to see deeper into water from a height than from close to the surface. An aeroplane scout can not only signal a warning to a battleship, but can also drop an explosive that would promptly send the submarine to the bottom. This naturally leads to the aeroplanes of rival fleets fighting pitched battles among the clouds.

The reciprocating engine has been ousted by the turbine, but already it is more than foreshadowed that the turbine may in its turn be eclipsed by the internal combustion engine. Apart altogether from affording increased speed, this new means of propulsion will abolish all furnaces and funnels, and will permit a battleship to become a flush-decked armoured citadel from end to end, probably turtle-backed, and wholly bomb-proof in order to withstand the missiles that will be dropped from the clouds by the enemy's aerial fleet. Take into consideration also the inevitable improvements in ordnance, bearing in mind the fact that already there are in existence guns capable of hurling a 1-ton projectile a distance of 16 miles. Altogether the naval warfare of the future appears to open up such appalling possibilities, that actual warfare will be rendered impossible, simply because the meeting of two hostile forces would practically spell annihilation for both.

On 5th June 1914 Sir Percy Scott made an important and lengthy declaration in the *Times* concerning submarines. The

following few excerpts are specially interesting:

"The introduction of the vessels that swim under water has, in my opinion, entirely done away with the utility of the ships that swim on the top of the water. . . .

"Submarines and aeroplanes have entirely revolutionised naval warfare, no fleet can hide itself from the aeroplane eye, and the submarine can deliver a deadly attack even in broad daylight.

"Under these circumstances I can see no use for battleships, and very little chance of much employment for fast cruisers. The Navy will be entirely changed; naval officers will no longer live on the sea, but either above it or under it, and the strain on their system and nerves will be so great that a very lengthy period of service will not be advisable; it will be a Navy of youth, for we shall require nothing but boldness and daring. . . .

"It has been argued to me that if a foreign power destroys our submarines we are at the mercy of his Dreadnoughts. There can



be no doubt about the accuracy of this statement, but submarines are difficult to destroy, because it is difficult to attack what you cannot see. A power that sends out ships to look for and destroy submarines will be courting disaster; the submarine when in the water must be kept away from, not looked for.

"Submarines will be hauled up on land, with arrangements for instantly launching them when required; they can only be attacked

by airships dropping bombs on them.

"What we require is an enormous fleet of submarines, airships, and aeroplanes, and a few fast cruisers, provided we can find a place

to keep them in safety during war-time. . . .

"I do not think that the importance of submarines has been fully recognised, neither do I think that it has been realised how completely their advent has revolutionised naval warfare. In my opinion, as the motor vehicle has driven the horse from the road, so has the submarine driven the battleship from the sea."

The foregoing opinions raised a storm of criticism, and columns of vigorous objections, which Sir Percy Scott collated, and then trenchantly replied to in detail. Appended are a few of the points

raised and the answers thereto:

(a) In the Russo-Japanese War the damage done by the torpedo

fell far short of reasonable expectation.

On the first evening after the declaration of war the Japanese, with torpedoes very inferior to those in use now, did sufficient damage to the Russian battleships to drive them into Port Arthur, and the menace of another torpedo attack prevented this fleet from again coming out of harbour at night.

(b) The submarine periscope is plainly visible at very great

distances.

My experience is that even at a short distance it is very difficult to see the periscope of a submarine. The periscope is small and

painted much the same colour as water.

"A Naval Officer" writes:—"During last manœuvres I was in a first-class armoured cruiser in the North Sea. We had an idea that submarines were about, because several of our ships had been 'sunk' somewhere about where we had been the previous day. We consequently were keeping a particularly bright look-out for them. The day was ideal for our seeing them, nearly calm, and quite clear. To our dismay one came to the surface less than a hundred yards from us, and signalled, 'I have fired two torpedoes into you, and claim you out of action."

(c) Submarines cannot find their prey at night.

A submarine lying on the surface at night would have no difficulty in seeing a battleship or any other ship; the difficulty would be for ships to see the submarine.

(d) Submarines can easily be destroyed by gun-fire when on the

surface.

Submarines do not wait on the surface to become targets for guns;

they dive and watch for another opportunity.

(e) Sir Percy Scott does not provide for the important duties which devolve upon the battleship in war, viz., the support of the cruisers protecting our food and raw material supply, as well as of the squadrons blockading the ports of the enemy.

If battleships in war attempt to blockade the ports of an enemy who has submarines, the battleships will probably go to the bottom. Battleships must keep away from the ports of an enemy if he has

submarines.

(f) We must have battleships and large cruisers to send out to capture our enemy's colonies.

If our enemy have submarines at their colonies it will be fatal

to send out battleships and large cruisers.

(g) We must still look to the gun for the decision between the organised sea forces of rival nations, as it surpasses the torpedo almost infinitely.

I like the gun, and I have done all I can for it, but if the submarine destroys the ship which is the floating gun-carriage, then the

gun is, within certain limitations, gone.

(h) It is the seaman's business to find the enemy and destroy him. It was the seaman's business to find the enemy, now it is the airman's business. It is still the seaman's business to destroy the enemy if he can. The seaman's difficulty will be to destroy the submarine.

(i) According to the theory of Sir Percy Scott, the inexpensive submarine will replace the expensive battleship; this will be a great saving in money; we shall not require fortresses, as the submarines will guard our coasts from invasion. This will be a further saving

in money.

On the contrary, the additional expense will be enormous, as we shall require such a great number of submarines. The Little Navyites must not think it is going to cheapen our defence. It is going to make it more expensive, and more efficient. It will save money in fortresses, because a fort will only keep a battleship four miles off; a submarine will keep her forty or more miles off.

When these words were written the author proposed to dismiss the subject with the intimation that the vexed question must remain unsettled, until further reliable data was available. The unexpected war against Germany, however, quickly provided incidents bearing upon the effectiveness of submarines and torpedoes, and even the layman could crystallise some hitherto mere speculations into something approximating to certainty.

MANNING THE FLEET

Just as naval vessels have undergone a complete transformation,

so has there been an enormous change in the personnel of the Fleet. We know that the ships of the old days were manned by two distinct classes of men, one engaged in the propulsion of the vessel, and the other in fighting her. It became necessary either to teach the soldiers how to handle sails, or to train the sailors in the use of weapons. This latter became the rule, so that a first-rate seaman was one who could work in the propelling of the ship and could fight equally well when necessary. The coming of steam introduced a new element, since the propulsion of the ship called for men acquainted with the management of engines and boilers. At first the engineers were allotted only an inferior place in the personnel of the ship. Naval men failed to recognise that steam was not an adjunct to sails, but shortly would entail the total abolition of canvas. Gradually the engineers and stokers proved their importance aboard the fighting ship, but, nevertheless, they were not taught the use of weapons. In one respect, therefore, the coming of steam caused very much a reversion to the old style, where the ship carried two classes of men, one for propulsion and one for fighting.

While masts and sails were used in conjunction with steam, the period of service of the average seaman provided all too little time in which to make him proficient in both forms of propulsion. But when sails disappeared, steam power became the profession of the sailor, who is now trained to be almost equally as good an engineer

as he is a fighting man.

Formerly considerable numbers of our seamen were forced into the naval service, whereas nowadays they are recruited chiefly from boys who enter between the ages of 15 and 16½ years. For about two years they are occupied in various training establishments, preparatory to being drafted into the Fleet for an engagement of twelve years, when they can either leave, or sign on for a further period of ten years. Most seamen adopt the latter course, in order to qualify for a pension. The system of to-day attracts boys in sufficient numbers to meet all reasonable demands for manning the Fleet with as highly trained and efficient a force as any nation could desire. In the case of the marines, they are recruited at a later age; and they undergo a period of barrack training before embarking in order to attain the sea experience that is necessary to make them a valuable adjunct to the seamen.

As a long service system leaves a very small margin for the formation of a reserve force, the Admiralty instituted the system of commanding the services of a certain number of merchant seamen. In return for an annual retaining fee they undertake to perform so many days' drill annually, and also to transfer wholly to the Navy in war-time. Such a reserve would prove of very doubtful value, unless the men had actually served in the Navy, in order to familiarise them with their duties. It was some slight improvement when the men were called upon for a periodical training aboard

some obsolete ship or in a shore battery; but it was infinitely better when it was decided to give the training on board modern commissioned ships. The men of the Special Reserve comprise those who have served a period of twelve years in the Service, together with a number who have completed their period for claim to pensions. Another reserve force consists of Naval Volunteers, of which there are divisions at all the chief mercantile ports. These



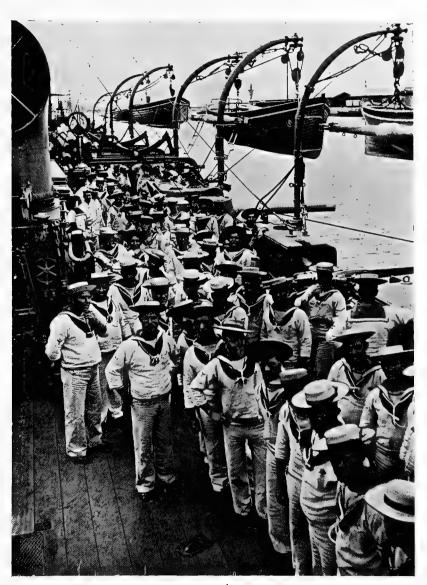
TRAINING SHIP "CORNWALL"

men are aided by a capitation grant and guns for training purposes. The authorities spare no pains to get as many officers and men of this force as possible to go through a period of sea-going experience in a ship-of-war each year. During one month's training each officer and man fills the position and does the particular duty which would be allotted to him when he reinforced his active service colleagues during hostilities. The naval volunteer force is of considerable value as forming a connecting link between the Navy and the civilian population, which must of necessity have a good effect from a recruiting point of view, and be the means of attracting likely boys into the regular service.

No longer do young officers go straight to sea as in the old times; they first undergo a period of training in a naval college, where their scholastic education is continued, while the rudiments of navigation and marine engineering are taught in workshops and special training vessels. They then go for a six months' voyage on a training cruiser, and at about the age of seventeen join the Fleet as midshipmen. A further three years' training prepares for an examination for acting sub-lieutenant. Confirmation in this rank necessitates courses of instruction in navigation and gunnery at different naval educational establishments, where there are opportunities to specialise in engineering, navigation, gunnery, torpedo, or the duties of a marine officer according to the bent and inclinations of the candidate.

Brevity must be applied to the successive ranks and pay of naval officers. Lieutenant rank is subject to successful examination, the pay commencing as 10s. per day, with an increase of 4s. a day for special engineering qualifications. Lieutenants retire at the age of 45, unless they have been promoted from the commissioned warrant rank, when they are eligible for a further service of ten years. Lieutenant-commanders attain their position after eight years' service in the lower grade; the pay commences at 13s. a day; 45 years is the age of retirement. A commander is responsible to the captain for the efficient working of the vessel, and promotion to the post is gained by selection; the pay is 22s. a day, or 27s. if with special engineering qualifications, and retirement at 50 years of age. Officers of this rank are usually in command of destroyers and small cruisers.

All important ships are commanded by officers of the rank of captain, promotion to which is also gained by selection. The pay ranges from 22s. 6d. to 33s. a day. The age of compulsory retirement is 55 years. For the office of rear-admiral, captains are promoted by seniority. During employment the pay is £3 a day, but "half-pay" during unemployment means 25s. a day. A rearadmiral commands a cruiser squadron, or he is the second-in-command of a battle fleet; 60 years is the retiring age. For viceadmirals, who attain their rank by seniority, the pay is £4 per day, and half-pay 32s. 6d. Officers of this rank are not only employed in the higher commands afloat, but are eligible for important adminstrative posts ashore. They are compulsorily retired at the age of 65 years. The office of admiral, too, goes by seniority; full pay, £5 a day; half-pay, £2, 2s. Generally there are only two admirals afloat, one commanding the Home and the other the Mediterranean Fleet; the commanders-in-chief at Portsmouth, Devonport, and the Nore are also admirals. The highest rank it is possible to reach in the Navy is that of Admiral of the Fleet. For this position the selection is made by the Sovereign. The full pay is £6 per day, but officers of this rank are seldom employed either



AWAITING CAPTAIN'S INSPECTION

afloat or ashore. Our own sailor king, George V, has been Admiral of the Fleet since 7th May 1910, and the three high officers serving with him at the end of 1914 were Sir Gerard Henry Uctred Noel, Sir Arthur Dalrymple Fanshawe, and Sir William Henry May.

The different branches and ratings in the Navy are so numerous that for full particulars the reader must be referred to the Government publications, which are easily obtainable. A 2nd class boy is paid 6d. per day, and can rise steadily to able seaman at 1s. 8d. per day. Leading seamen are paid 2s. 2d., and petty officers 3s. 2d., rising to 4s. 4d. per day. A gunner is paid 6s., rising to 9s. per day after 15 years' service. Chief gunners are commissioned warrant officers at 10s. per day, rising to 12s. after 8 years' service. At the age of forty the naval man receives a pension in accordance with his rating and length of service.

Feeding the Navy is a wonderful and interesting problem to the landsman. Each blue-jacket's daily food costs the Admiralty about rod. a day, so that the handyman cannot by any stretch of imagination be viewed as a pampered individual. Generally the daily rations consist of I lb. of bread, \frac{1}{2} lb. fresh meat, I lb. fresh vegetables, 4 oz. sugar, \(\frac{1}{2}\) oz. tea (or 2 oz. coffee); I oz. jam, marmalade, or pickles; † pint of spirit. There are, however, various alterations subject to circumstances. When fresh meat and vegetables are not obtainable salt pork and preserved meat are served out on alternate days, with split peas and potatoes on one day, and flour, suet, and raisins on another. In addition to the fixed rations there is an allowance of 4d. a day to purchase from the canteen other food that takes a man's fancy. Instead of the spirit ration a man may have a monetary allowance, and a similar allowance is made for any other rations that he prefers to forgo. With these "savings" the man generally obtains little delicacies to vary the stereotyped diet. As might be expected, the sailorman applies various humorous titles to some of the dishes served up to him. The biscuit which may take the place of bread is known as "hard-tack," and tinned meat is "Fanny Adams"; a bloater is a "one-eyed steak"; and haddock is "deep-sea beef." etc.

Administration of the Navy

King Henry I probably drew up the first regulations for maritime affairs, and in 1189 Richard I ordained laws concerning discipline aboard ship, as set forth on page 44. About 1297 the title of "Admiral" superseded the designations that hitherto had been in use, such as justice, governor, constable, or captain of the King's sailors and mariners. In 1303 Gervase Alard was the Admiral and Captain of the Sailors and Mariners, and in 1361 Sir John Beauchamp was the Admiral of the King's South, North, and Western Fleets. It was about the year 1426 that the head of

the naval forces took the title "High Admiral," and from that time onward the office of Lord High Admiral remained unbroken until r628. Henry VIII established a Navy Board to deal with what were called the civil affairs of the Navy; its members met weekly on Tower Hill, and reported their proceedings monthly to the Lord High Admiral. Really this Board, subject to a few modifications, performed its duties until r832. Queen Elizabeth caused some orders to be issued to the commanders of ships. It was laid down that prayers should be said twice daily, and the seamen were not to engage in dicing, brawling, or bad language. Every evening the vessels in a squadron or fleet were to approach near enough to the flagship to speak with the admiral. The watch was to be set at 8 P.M. by singing the Lord's Prayer or one of the Psalms.

In 1868 for the first time certain great officers of state were appointed as Commissioners to take over the functions of the Lord High Admiral, whose office was revived only on a few occasions, such as when Charles II made the Duke of York Lord High Admiral, or when the Duke of Clarence (afterwards William IV)

held the office for sixteen months in 1827-28.

The nine Commissioners who now form the Board of Admiralty include both professional seamen and civilians, their titles and general duties being set forth in a Memorandum of 1912 as follows:

First Lord . . . General direction of all business.

Naval Element—

First Sea Lord . . Organisation for war and distribution of the Fleet.

Second Sea Lord . Personnel. Third Sea Lord . . Material.

Fourth Sea Lord . Stores and transport.

Civil Lord . . . Works, buildings, and Greenwich Hospital.

Additional Civil Lord . Contracts and dockyard business.

Parliamentary Secretary. Finance.

Permanent Secretary . Admiralty business.

It may appear to be somewhat of an anomaly that the First Lord of the Admiralty should be a politician, and generally with no special knowledge of naval matters before his appointment. His business, however, is chiefly political. He is the medium of communication between his professional advisers and the Cabinet. It falls to him to explain to the country, through Parliament, the necessity of the current expenditure, and especially to advance reasons for any increased demands upon the taxpayer. It must be remembered that the Admiralty is the largest spending department of the Government. It was thought a wonderful advance, when in the reign of William III Parliament voted £2,000,000 for new ships and guns, or less than the price of a single ship of the

CLEARING FOR ACTION

"Iron Duke" or "Queen Elizabeth" class. If our Dreadnoughts alone go for an eight-hour run they consume £3000 worth of coal. In firing six broadsides the "Queen Elizabeth's" guns vomit 52 tons of metal at an expense of about £8000. Such facts assist one to understand why the annual expenditure on the Navy is little short of fifty millions sterling, or about four times greater than was the amount only thirty years ago.

The vital points of practical naval administration are the concern of the four Sea Lords, in whose ranks many brilliant naval men have served. The onerous duties of the First Sea Lord scarcely need pointing out. He is charged with "preparation for war" at any time and anywhere; he has some 600 ships and 150,000 men to maintain in a state of perfect efficiency, to compass which swallows up about a million pounds sterling per week. One of the most famous First Sea Lords of the Admiralty was Sir John A. Fisher, who was in office from 1904 to 1910. It was largely owing to his intense practical knowledge, his amazing energy, his conception of our naval needs, that the British Dreadnought came into being with a swiftness that surprised the enemy, and gave us a lead that was to count heavily when we were plunged into the great struggle for our existence. What Sir John A. Fisher did for the Navy is solidly written in the ships and guns of 1906-12—fourteen Dreadnoughts and eight battle cruisers that not only revolutionised our own Fleet, but set the fashion to the whole naval world. The mere thought of Fisher's legacy brought comfort to the nation in that hour of shattering surprise when the great ordeal loomed upon us; and the quidnuncs who would have curtailed our Dreadnought programme by half were eaten up with regret that they had not preached the doubling of it.

The Second Sea Lord controls the manning and training of the seamen, the royal marines, and the reserves; he is responsible for the hospital organisation, the maintenance of discipline, and he makes the appointments of officers, except those of the higher grades, which are controlled by the First Lord. The Third Sea Lord deals with the provision of ships and their machinery, armour and ordnance, airships, waterplanes, docks, etc. The chief matters controlled by the Fourth Sea Lord are pay, coaling, victualling, and stores generally.

The foregoing brief description of the Board of Admiralty gives but a broad idea of the work of a vast organisation that can only accomplish its colossal task by the aid of various subsidiary departments, one of which, the War Staff, is the real brain of the Navy. This department, which was organised only in January 1912, grew out of the Foreign Intelligence Branch, which was formed in 1883, to collect information concerning naval developments in general, and to watch the development of foreign fleets in particular, so that we may keep up the standard of superiority, not only in one sea but all the seas, which is the bedrock of our national existence.

CHAPTER XXVI

THE NAVY V.C.'S

NOTHING arouses the admiration and stirs the hearts of all peoples more than naval and military deeds of prowess against the enemy. Those who face untold dangers on the sea, or in some far-off land, are always accorded an affectionate reception by their admiring and grateful compatriots. It was ever so, probably as far back as the battle of four kings against five, in the mists of Biblical history. The Romans rewarded their naval commanders for gaining a decisive victory, with circular ornaments of gold to wear round the head or neck; and the sailor who was first to leap aboard the ship of an enemy, or to save the life of a comrade in battle, was assured of a reward. In the case of the rank and file the decoration usually took the form of a crown of oak leaves. This simple distinction made its wearer an honoured visitor at all public functions; freed him from taxes; while the man whose life had been saved was expected to act towards his preserver as a good son towards his father.

It was not until the reign of Queen Elizabeth that medals were awarded to English soldiers and sailors. The earliest ones were oval in shape. On the obverse of one is a bust of the Queen; and on the reverse, a bay tree on an island. On another reverse is depicted a flying fleet with the words, "I came, I saw, I conquered." These medals were meant to be worn round the neck, or on the arm, or in the hat.

The modern medal par excellence is the Victoria Cross, the proudest personal decoration that can be earned by any sailor or soldier. It was instituted in the year 1856 by Queen Victoria, who was impressed greatly by the heroism of our sailors and soldiers engaged in the Crimean War. It was ordained by royal warrant that the new decoration may be awarded only to those "officers and men who have served us in the presence of an enemy and shall have then performed some signal act of valour or devotion to their country." It was also strictly specified that neither rank, long service nor wounds, no condition or circumstance, whatsoever, save conspicuous bravery, can establish a sufficient claim to the honour.

It thus came about that the most honourable haval or military decoration may be won by the humblest seaman or soldier, although it is a distinction that any monarch in the world would be proud to bear upon his breast. The Victoria Cross, made of gun-metal captured from the enemy, weighs a little less than an ounce, and its intrinsic value is only a few halfpence; but it is jealously prized, for the earning of it means looking death squarely in the face. Maltese cross in shape, in the centre is the Royal Crown, and below it is a scroll bearing the words, "For Valour." On the clasp are branches of laurel, and from it the Cross hangs, supported by the

initial "V." The coveted decoration is worn on the left breast, suspended by a blue ribbon in the

Navy, a red in the Army.

Up to the end of the year 1914 the number of Victoria Crosses awarded numbered 430, and of this total nearly three-fourths were won by conspicuous gallantry in the Crimean War and the Indian Mutiny. The total number of Crosses gained by the Royal Navy and Royal Marines is forty-five—forty-one by the former and four by the latter; and more than half of them have gone to the rank and file.

The first distribution of Victoria Crosses took place at a magnificent demonstration in Hyde Park on 26th June 1857, when Queen Victoria, mounted on a white charger, pinned the plain bronze cross, the precious symbol of devoted heroism, on the breasts of sixty-two



THE VICTORIA CROSS

officers and men. "Cheer after cheer ascended from the thousands of spectators, who were proud of their Queen, proud of their heroes, and proud of the race that gave them birth." Here follows a brief account of how each of the naval V.C.'s was won.

The very first Cross awarded went to the Navy, in the person of Midshipman Charles Davis Lucas, on board the "Hecla," on 21st June 1854, at the bombardment of Bomarsund. The vessel was one of three, engaging the eighty guns of the fort at a distance of only five hundred yards. A shell crashed on to the quarter-deck, where the messenger of death lay hissing and spluttering before it would burst to create havoc all around. Quick as thought the middy darted to the grim peril, snatched up death in his hands, and hurled it over the bulwarks into the sea. It burst before it

struck the water, but it did no harm to anybody aboard the "Hecla." For this heroic deed Lucas was promoted on the spot, and the V.C. followed in due course on the recommendation of Sir Charles Napier. In later years the hero became Rear-Admiral Lucas, V.C.

Notwithstanding the cordon of British ships at Bomarsund, it was certain that despatches were being smuggled into the fort from the island of Wardo. Lieutenant John Bythesea (who afterwards rose to admiral rank) obtained permission to attempt the interception of a mail and despatches, which an aide-de-camp of the Czar desired to deliver to the Russian general. Bythesea selected Stoker William Johnson to accompany him. The couple landed, and, thanks to Johnson's knowledge of the Swedish tongue, during a stay at a farmhouse they learnt how the despatches were carried. More than once they narrowly escaped falling into the hands of the enemy, once disguising themselves as fishermen, and again as Finnish peasants. One night a party of five Russians, bearing the despatches, was attacked by the Englishmen, who had been lying in wait for them. Two of the enemy decamped. thinking they were opposed by a large force. The remaining trio Bythesea and Johnson overpowered and disarmed; and not only forced them to carry their mail bags to a boat, which the daring couple had in readiness, but the prisoners had to row, while Bythesea steered and the grinning stoker kept guard in the bow. For outwitting the enemy and securing valuable papers by the utmost skill and daring, both Bythesea and Johnson gained the coveted decoration.

Captain William Peel, with the Naval Brigade before Sebastopol, achieved the proud distinction of winning the Cross three times over, and the three dates were duly inscribed on his medal. On 18th October 1854 a live shell, with the fuse still burning, dropped among several cases of powder, outside a magazine. The captain seized the shell and threw it over the parapet, just as the missile exploded. But for his courage and promptitude the magazine would have been blown up, and every soul near it would have been swept out of existence. On the 5th of the following month, at the battle of Inkerman, Peel gallantly assisted the officers of the Grenadier Guards in defending their colours when severely pressed at the Sandbag battery. Finally, on 18th June 1855, he volunteered to lead a ladder party in the assault on the Redan; and carried the first ladder until he was wounded.

Young Mr N. Hewitt, acting-mate of the "Beagle," performed a conspicuous act of gallantry on the day after the battle of Balaclava. He was in charge of a Lancaster gun, which he was ordered to spike and retreat when the enemy were within only 300 yards of the battery. Hewitt did not believe that the order had come from Captain Lushington, and his seamen, aided by some soldiers,

traversed the gun round. Blowing away the parapet, he opened on the advancing Russians so effectively that they broke and fled. In addition to the Cross, Mr Hewitt won a lieutenancy. At Inkerman the hero again was brought under the notice of the

commander-in-chief for his gallant services.

Midshipman Edward St John Daniels, of the "Diamond," fought by the side of the heroic Captain Peel; and he, too, gained the enviable distinction of a thrice-dated Cross. When the horses of a battery wagon bringing in powder, were shot down, Daniels was one of the first to respond to the call for volunteers to bring in the powder. He fought shoulder to shoulder with his gallant superior when assisting the Grenadier Guards at Inkerman; and when Captain Peel was wounded on the glacis of the Redan, Midshipman Daniels tied a tourniquet on Peel's arm, while exposed to a heavy fire.

At the battle of Inkerman the Russians were making a desperate attack on the Right Lancaster Battery. At a critical moment five bluejackets snatched up muskets belonging to wounded soldiers and got on to the banquette, from which they fired upon the enemy. By using fresh muskets, loaded for them by the wounded soldiers behind the parapet, the seamen kept up such a withering fire that the Russians at that point had to withdraw. Two of the heroic quintette were killed, but James Forman, Thomas Reeves, and Mark Scholefield each won the V.C.

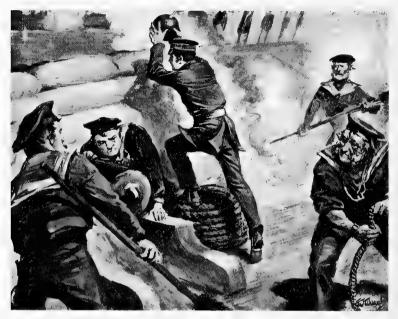
In the same battle Corporal John Prettyjohn, of the Royal Marine Light Infantry, distinguished himself by his cool courage in going on ahead of the men and opening fire upon the enemy,

killing four of them and checking their advance.

John Sullivan, a boatswain's mate, by an exhibition of coolest daring, rendered a great service to the Naval Brigade before Sebastopol. The bluejacket belonged to No. 5 Battery, which suffered serious damage, as did the British advanced works, by a concealed Russian battery, whose activity it was necessary to check. Sullivan set out to find this danger spot, and when he had located it, he proceeded to a knoll beyond it, although the intervening space was swept by shot and shell. Arrived at the little elevation, he planted a flag to aid the aim of the British guns, that were enabled thus to silence the Russian battery. For this act the boatswain's mate was awarded the Cross. The official announcement testified that, "John Sullivan's gallantry was always conspicuous," which seemed to intimate that Sullivan had developed his bravery into a habit.

For a daring feat at Genitchi on the Black Sea, in May 1855, three Crosses were awarded. At that place there was a large depot of the enemy's stores and provisions. When this had been shelled by our fleet, it was discovered afterwards that some of the biggest storehouses were still intact. The district swarmed with

alert Cossacks, so that any attempt to complete the work of destruction would be accompanied by the gravest danger. Lieutenant Cecil W. Buckley of the "Miranda," Lieutenant Hugh Burgoyne of the "Swallow," and John Roberts, gunner, volunteered for the desperate service. They landed from a small boat at night away from all aid of the fleet—in fact, out of gunshot of it. The three men, after several narrow escapes from discovery by the Cossacks, reached the storehouses and succeeded in setting them in a blaze.



MIDSHIPMAN LUCAS WINNING THE FIRST VICTORIA CROSS ABOARD THE "HECLA," 21ST JUNE 1854

On their return they were nearly cut off by the enemy, who fired on them as they made off in their boat. All three were awarded the Cross for the dangerous work in which they had engaged with

complete success.

Four days later, at Taganrog, Lieutenant C. W. Buckley made a second claim to the Cross. The fleet was engaged in bombarding the town; and in a gig, manned by four volunteers, Buckley landed repeatedly and fired stores and magazines. This "dangerous, not to say desperate, service," was not done by stealth, but in full sight of several thousands of Russian soldiers who were defending the place. Boatswain Henry Cooper rendered the lieutenant gallant aid and in due course received the decoration.

On 5th June 1855 Bombardier Thomas Wilkinson, of the Royal Marine Artillery, won the Cross in the advanced batteries before Sebastopol. When the breastwork was greatly damaged by the Russian artillery, Wilkinson most gallantly defended it

under a galling fire.

Immediately after the assault on Sebastopol on 18th June 1855, a soldier of the 57th Regiment, wounded in both legs, was calling for assistance. He was lying in an open space that was swept by a heavy fire. Lieutenant H. J. Raby, with Forecastle Captain John Taylor and Henry Curtis, boatswain's mate, climbed over a breastwork and raced for seventy yards to the wounded man, whom they carried to a place of safety. Each of the trio won the decoration, but only the lieutenant was alive at the end of the war to wear it; and it happened that in Hyde Park, two years later, he was the first hero to be decorated by his Sovereign.

Joseph Trewavas was awarded the V.C. for a notable boat service on 1st July 1885. He was the leading spirit in the crew of a boat from the "Beagle," that was engaged in cutting the hawsers of the floating bridge which the enemy had constructed in the Straits of Genitchi. This daring operation entailed going within eighty yards of hundreds of riflemen who lined the beach. Just as Trewavas executed his desperate purpose he was struck

by a bullet.

When the boats of the "Arrogant," 46, were engaging the Russian gunboats off Viborg on 13th July 1855, a shell from a fortress struck a cutter and swamped it. The crew clung desperately to the sides of the craft as it drifted towards the fortress, from which grape and small shot were pouring upon the disabled boat. Captain of the Mast George Ingouville, on the "Arrogant," although wounded, leapt into the sea and endeavoured to tow the wrecked boat in the opposite direction. His strength was proving unequal to the task, when Lieutenant G. D. Dowell of the Royal Marine Artillery, on the "Ruby," went to the rescue in a boat for which he had called for volunteers. Although the Russians by concentrated fire sought to thwart the lieutenant's purpose, he saved three of the men and transferred them to the "Ruby." Dowell and his party then returned and rescued Ingouville and brought the damaged cutter along with them. Even the Russians joined in the cheers to which the British crews gave vent as the heroes gained safety in triumph. Dowell and Ingouville got the V.C., for their share in the business.

Boatswain John Sheppard, of the "Jean d'Acre," won the Cross by an act which Sir E. Lyons described as "a bold one, and gallantly executed." His mission was to attempt to blow up one of the Russian ships-of-the-line lying in Sebastopol harbour. For this purpose he proceeded in a punt in which was carried an exploding apparatus. He succeeded in getting past the Russian

steam guard-boats at the entrance of Careening Bay, but could get no further owing to a long string of the enemy's boats, which were engaged in transporting troops from the south to the north side of the bay. On 16th August 1855 the gallant boatswain made another equally meritorious attempt against the

enemy.

Boatswain J. Kellaway, of the "Wrangler," won the Victoria Cross under very unusual circumstances, since his qualification for the honour caused him to be made a prisoner of war. Mr Odevaine, mate, Kellaway, and three seamen had gone on a mission to burn some boats, fishing stations, and haystacks on the far side of a small lake. They were attacked by fifty Russians who had been lying in ambush. One of the seamen was captured, but the rest of the party were making good their escape when Odevaine accidentally fell. Kellaway, thinking his chief was wounded, without a moment's hesitation, turned back to the rescue. While lifting up the mate, the enemy surrounded them and effected their

capture, notwithstanding a strenuous resistance.

For use during the siege of Sebastopol the Russians had stored immense quantities of corn, etc., on the shores of the isthmus of Perekop: and from the point of view of the allies the destruction of the stores was highly desirable. On the night of 11th October 1855, three men set out from the "Weser" to attempt a desperate blow at the enemy. Commander J. E. Commerell (later Admiral Sir J. E. Commerell), Quartermaster W. Rickard, and a seaman named Milestone, were well aware of the enormous risk they ran. but were not vastly concerned about it. They landed on the Spit of Arabat, across which they dragged their boat to the Putrid Sea. Again taking to the oars, they reached a point only three miles from the stores. They landed, and stealthily made their way to the huge granaries, cleverly avoiding the Cossacks who ranged the district, and evading the guard in charge of the granaries. Commerell and his companions effected their purpose, and in a short time the flames from the burning stores were lighting up the whole countryside. Stealth was now out of the question. The desperate raiders had to fly in the light of their own making. with the Russians in hot pursuit. When at length they got out of range of the light of the conflagration, they had to ford two streams in the darkness. They had almost reached their boat when they stumbled into a morass. Commercell and Rickard contrived to flounder out, but Milestone's case appeared hopeless; and the avenging Cossacks were close at hand. While Commercell got the boat ready to push off, Rickard managed to pull the exhausted seaman out of the quagmire and, half carrying, half dragging him, at length reached the shore. Just as the Cossacks rushed up, the boats pushed off, and in the darkness the Englishmen escaped the shots of the baffled enemy. Commercil and Rickard worthily earned their V.C.'s in this particularly perilous under-

taking.

Of all heroic night adventures, none were more strenuous and dangerous than those engaged in by Lieutenant George F. Day. His ship, the "Recruit," was off the Strait of Genitchi for the purpose of wacthing several Russian gunboats and the Chinghan Bridge, by means of which stores were passed to the Russian field army in the Crimea. On the Spit of Arabat was a strong force of Cossacks together with Horse Artillery. In order to cut off this Russian channel of supplies, a naval expedition was being organised, and in the meantime Lieutenant Day undertook the task of reconnoitring the bridge to gauge the prospects of an attempt to cut out the gunboats. At night he was pulled ashore by a couple of blue jackets, and landed without being discovered by the Cossack patrols. The boat then put off back out of gunshot, but would lie abreast of the spot, until the lieutenant hailed to intimate he was ready to return. He had a few buscuits in his pockets and also carried glasses; in his breast pocket reposed his commission, a precaution that, in case of failure, would save him from being hanged as a spy.

As soon as he was left to himself, Day got under cover of the shrubs on the ridge beyond the strip of beach. His situation was fraught with extreme peril, for the Cossacks were keen scouts, and even the disturbance of the wild fowl nesting among the reeds might arouse the suspicions of a patrol and lead to his discovery. darkness the lieutenant crept stealthily forward, not infrequently finding himself knee deep in stagnant water. Often he had to lie prone within a few yards of a Cossack, whose dark outline showed against the sky. Fortunately for the adventurer the sentries were some distance apart, and between times he got breathing space, and each time that he passed a danger point he was nerved and encouraged to tackle the next one before him. Only after several hours of absolute crawling did he gain a point from which, in the light of the watch-fires of the enemy, he was able to make useful mental notes concerning the position of the gunboats, etc. This accomplished, he commenced the return journey to the boat, which occupied seven hours. It was nearly four a.m. when he rejoined the two anxious seamen, and he returned to the "Recruit" to report to his captain. While a plan of attack was being prepared, Lieutenant Day from the mast-head observed an increase in the enemy's forces on the Spit. For the sake of the projected attack, it was desirable to reconnoitre the position on the Spit afresh.

Again Lieutenant Day was taken ashore, on a bitingly cold and stormy night. At first he took the wrong course and got into a swampier region than before; but shortly he discovered his previous path. Twice he was within but a few paces of the Cossack patrols, and in one narrow shave, a silent horseman almost rode over

him as he lay behind a whin bush. After a time he gained the outskirts of the Russian camp. Like a shadow Lieutenant Day stole to the top of a knoll that afforded him a good view of hundreds of watch-fires. Without a doubt the enemy's numbers had been trebled and the gunboats evidently were fully manned, whereas on the occasion of his previous visit they had only watch crews aboard. Having satisfied his thirst for information, the lieutenant commenced to glide down the hillock, when a bullet nearly put an end to his mission. Several others shots followed. Revolver in hand, he waited a moment for the foe to disclose their whereabouts, and then crept into a bed of reeds in a hollow. It was a false alarm; only Cossacks firing their guns as a token of their watchfulness.

Greatly relieved, he resumed his journey towards the coast. His task was infinitely more difficult than before. At intervals of only a few yards he was constantly in danger of discovery, and frequently he floundered into half-frozen quagmires. To travel five miles took nine hours, and he reached the water's edge almost in a state of collapse; his clothes were soaked; his hands were

torn and bleeding; and he was thoroughly benumbed.

Then his stout heart almost quailed. He could not find the boat! The seamen had given him up for lost and had returned to the ship to report. Weary and worn, for a moment the lieutenant lost his head, and fired his revolver to attract the attention of his friends aboard the "Recruit." Obtaining no response, and unable longer to fight the cold and his intense weariness. the brave fellow fell back on the beach. Fortunately his shot did not lead to his discovery by the enemy, who had perceived the flash, but had assumed the firer was one of their own men. Just before davbreak an officer from the "Recruit" was rowing close in along the shore, making a last attempt to give Day an opportunity to come off. Almost by a miracle he discovered the exhausted lieutenant, and bore him off to friends and safety. The hero's information was of the highest value, for which he received the special thanks of the Admiralty. Later, he was awarded the V.C. and none could gainsay his claim to it.

During the course of the Indian Mutiny the Victoria Cross was won by seven naval men. On 16th November 1857, during the attack on the Shah Nujeef at Lucknow, the naval brigade suffered severely from the fire of some rebels who were posted behind the gateway. As it was impossible to reply effectively from the front, Captain Peel called for volunteers to climb a tree overlooking the gate in order to fire at the enemy. Lieutenant Nowell Salmon and Boatswain Harrison, both of the "Shannon," climbed into the branches, which touched the walls of the Shah Nujeef. Salmon did the firing, while Harrison loaded for him; and in this manner the lieutenant was able to keep up a steady fire and pick off the sharpshooters by the gate. During the whole of the time both heroes

were open to the dusky snipers, and Salmon was dangerously wounded. For their daring both the lieutenant and the seaman received the Cross. Upon the same occasion Lieutenant James Young and Captain of the Foretop William Hall won the decoration for conspicuous courage in serving a 24-pounder under a terrible fire at only 20 yards' distance from the enemy. The seaman was one of the three men of colour who have won the Cross, the other two being soldiers.

Midshipman Arthur Mayo, of the Indian Navy, was quartered

at Dacca in Bengal. The Sepoys having revolted, orders to disarm them were given on 22nd November 1857. Three of the rebel guards vielded without resistance; but the fourth drew up on Lall Bagh, where they had loopholed the hospital and barracks: and as they had a couple of 6-pounder field guns, it would prove no easy task to dislodge them. the naval brigade entered the enclosure the mutineers fired. The seamen replied with a volley and charged the barracks on the hill. their howitzers firing at the enemy's two guns, one of which was blazing only at our men, who had reached the higher ground. The officer in command having given orders for the gun



CAPTAIN WILLIAM PEEL, HERO OF A THRICE-WON CROSS

to be taken, Mayo collected a few men and called upon them to follow him. With a cheer they rushed down the hill, the midshipman ahead by twenty yards. The Sepoys, working the gun, depressed it and were preparing to fire into Mayo's party when the man about to apply the match was shot. Another rebel sprang into his place, but Mayo and his men were on him. All the rebel party were slain. Midshipman Mayo was only seventeen years of age and was the youngest of the V.C., heroes.

Seaman Edward Robinson was the fifth of the "Shannon" men to earn the Cross. On 13th March 1858, at the siege of Lucknow, the sandbags of the battery, where Robinson was serving, became ignited. He dashed up and extinguished the flames under

a terrific fire from the enemy only fifty yards off. He was danger-

ously wounded while performing the gallant act.

Mr George Bell Chicken was a volunteer in the Indian Naval Brigade. At Suhydnee, on 27th September 1858, he formed one of a party in pursuit of a strong force of mutineers. The "Pandies." seeing that they greatly outnumbered their pursuers, were rallying for a charge that would have meant death for the foremost of the pursuing party. At that critical moment Mr Chicken rushed forward into the middle of the mutineers, where he slashed out right and left, and cut down five of the enemy before he fell wounded himself. Just as he was in imminent danger of being hacked to pieces, a few loyal native police and troops, who were attached to the pursuers, charged into the rebels, killing many, and saving the life of Mr Chicken, whose heroism had gained the Cross.

Two V.C.'s were won by naval men in the Maori War in New Zealand. On 28th March 1860, Leading Seaman William Odgers, of the "Niger," took part in an attack upon a native pah at Taranaki. He was the first man to mount the stockade; and getting into the stronghold, he hauled down the enemy's flag. It was officially stated that this act of personal intrepidity contributed largely to the success of the attack. The second Cross was gained by Captain of the Foretop Samuel Mitchell, of the "Harrier." During an attack on Te Papa, Tauranga, he entered the pah with Commander Hay, who almost immediately fell, mortally mounded. Mitchell carried his leader out of further danger, although the gallant commander

ordered him to leave him and secure his own safety.

In the second Chinese War, Seaman George Hinckley of H.M. Sloop "Sphinx," won the Cross at Fung-wha on 9th October 1862. During an attack on the eastern gate of the town, Mr Croker, Master's Assistant, fell wounded, while 150 yards away from a joss-house which was the nearest shelter. Hinckley carried the wounded man to the joss-house, under a hot fire of musketry. Having accomplished this humane act, the gallant seaman returned to render similar aid to Mr Brennan, who was wounded and still lying under a raking fire. Hinckley carried his second charge to safe cover, and then

took his place in the fighting at the gate.

In the Japanese War of 1864 three men of the "Euryalus" distinguished themselves by winning the Cross during the attack on the batteries at Simonoseki on 6th September. Seaman William Seeley was the recipient of the honour on account of the intelligence and conspicuous gallantry he displayed, in going ashore alone to ascertain details concerning the strength and disposition of the enemy. To gain the required information he had to traverse ground that swarmed with Japanese. In addition to this great service rendered to his commander, Seeley led the seamen in the fighting at close quarters, the knowledge he had gained enabling him to tackle the enemy, where their entrenchments were weakest. Mid-

shipman Duncan G. Boyes gallantly carried the colours after two colour-sergeants had been shot down, one of them mortally wounded:



CAPTAIN OF THE FORETOP SAMUEL MITCHELL AT TE PAPA, TAURANGA, 28TH MARCH 1860

he kept ahead of the leading company, the colour being shot through six times. Captain of the After-Guard Thomas Pride bravely supported Boyes in the gallant rush. Even when he was shot in the breast, he still ran close beside the colour, turning round to cheer on the men behind him.

In the Egyptian War of 1882 the Victoria Cross was won on the deck of a ship, the only occasion since Midshipman Lucas gained the first Cross of all aboard H.M.S. "Hecla." While the "Alexandra" was engaged in pounding at the Egyptian batteries, a 10-inch spherical shell passed through the side of the ship, where it was unarmoured, and lodged on the main deck, which was crowded with men. Gunner Israel Harding heard a shout of warning that there was a live shell just above the hatchway. Although he was below at the time, and out of harm's way so far as he himself was concerned, he dashed up a ladder. First he threw some water on the spluttering fuse, and then he picked up the missile and plunged it into a near-by tub of water. The gallant Harding was promoted Chief-Gunner at once. The shell was afterwards inscribed with particulars of the heroic exploit, and it was accepted by the Prince of Wales on behalf of Princess Alexandra, whose name the

ship bore, and by whom she had been launched.

In the Sudan War of 1884 Sir Gerald Graham, with a force of less than 4000 troops, encountered the enemy 10,000 strong at El Teb. The British advanced in the form of a square, the naval brigade of 115 officers and men serving the machine guns with telling effect. The bloodthirsty children of the desert rushed on the comparatively little force, scorning death as the guns mowed them down in heaps. During the struggle a corner of the square was broken, and the Arabs made fierce efforts to widen the breach. Captain Arthur Knyvet Wilson, on the staff of Rear-Admiral Sir William Hewett, V.C., had attached himself to the right half battery of the naval brigade in the place of Lieutenant Royds, mortally wounded. Just as an Arab was about to spear one of his men, Captain Wilson ran his sword through the body of the swarthy warrior, with such force that the weapon bloke off at the hilt. The Captain's position might have been deemed hopeless, but he did not appear to be disconcerted. He hurled the sword hilt into the face of an oncoming foe and then turned upon other assailants with his bare fists. One after another he literally hammered to the ground. For a moment the Arabs fell back before the extraordinary onslaught, believing the Englishman to be mad. That moment was sufficient for his adoring blue-jackets to snatch their Captain back to safety—the gap was filled up and the slaughter of the enemy commenced afresh. Captain Wilson, although wounded, continued with the half battery during the day. For this heroic act the Captain's name was added to the V.C. roll of honour. In later years he rose to the rank of Admiral, and afterwards was Senior Lord of the Admiralty.

On 6th September 1898 H.M.S. "Hazard" landed a party of men at Candia in Crete, where revolutionary disturbances were

in operation. As the party sprang ashore, they were greeted with a terrific hail of bullets. All except Arthur Stroud, an ordinary seaman, gained safe cover, but he fell back in the boat seriously wounded. Surgeon William J. Maillard dashed back through the deluge of lead to the boat, in order to carry Stroud out of further danger. But the boat got adrift and the brave surgeon was unable to effect his purpose. Nothing remained for him to do save return to his post, which he reached with his clothes literally riddled with bullets, though strangely enough he remained unhurt. The gallant officer was awarded the Cross, although he had to wear it without an associated war medal.

The Boxer rising in Northern China in 1900 witnessed two acts of conspicuous gallantry by naval men, for which they were awarded the V.C. On 24th June Captain Lewis S. T. Halliday, of the Royal Marine Light Infantry, was serving in the garrison defending the Peking legations. On that day the enemy, consisting of Boxers and Imperial troops, fiercely attacked the west wall of the British Legation. They set fire to the west gate of the south stable quarters, and then took cover in the buildings adjacent to the wall. Not only were the flames a grave danger, but the enemy kept up a galling fire through the smoke. A sortie having been decided upon to drive the Chinamen out, Captain Halliday, at the head of a score of marines, led the way into the buildings. At the very outset, and before he could use his revolver, the captain was shot through the left shoulder at short range, the bullet fracturing the bone and carrying away part of the lung. In face of so severe an injury Captain Halliday killed three of the enemy; and then he walked off to the hospital, telling his men to "carry on and not mind him," nor would he allow one of his men to aid him, as it would diminish the force engaged in the sortie.

On the r3th of the following month Midshipman Basil John D. Guy, of H.M.S. "Barfleur," was engaged in the attack on Tientsin city. The naval brigade was under a heavy cross fire and several men had fallen, one of them, an A.B. named M'Carthy, being fifty yards from cover. Guy went to his assistance with the intention of removing the wounded man to a place of safety. He found that M'Carthy was too heavy and helpless for him to carry, and so he stayed by him and bound up the wound. In the meantime, the other members of the brigade having reached cover, the enemy concentrated their fire on the wounded man and the middy, the ground being ploughed up with bullets. Guy then ran to cover and returned with bearers to bring in the disabled seaman. He was put upon a stretcher, but, unfortunately, just as cover was reached, another bullet struck M'Carthy and killed him. The midshipman received the Cross in due course.

CHAPTER XXVII

THE FLAG

From the very earliest times no sooner did men band themselves together for a common purpose than they sought some emblem as a symbol of their sentiment, and especially as a rallying point in battle. The earliest Biblical mention of any such distinctive badge is found in the instructions of God to Moses in the wilderness of Sinai: "Every man of the children of Israel shall pitch by his own standard with the ensign of their father's house." There is here proof that not only the tribes, but even branches of the same, possessed their own particular emblem, very much in the same way as in more modern times the clans of Scotland adopted different coloured tartans. Digging deeply down into the debris of history outside the Bible, we find from ancient sculptures and carvings, that the Egyptian standards and ensigns were but the figures of the favourite animals of the nation, or objects which would inspire awe, or reverence.

It is impossible to say when flags came into use, but we have

it upon poetic authority that when

"The Assyrian came down like a wolf on the fold, That host with their banners at sunset were seen."

The reference is to the army of Sennacherib, which was routed upon that occasion some seven centuries before the Christian era. There is every reason to believe that the Saracens were the first to adopt flying flags, the earliest form consisting of a square piece of cloth suspended from a cross-bar at the end of a long spear.

When the Romans first came to Britain their standard was the figure of an eagle affixed to the end of a spear-shaft; but every Roman cohort, the tenth part of a legion, had its own banner or square of woven cloth, on which was the design of a serpent or dragon. Doubtless the first real flag, as we understand it, ever seen in Britain, was the blood-red standard of the Vikings, behind which was left a trail of fire, pillage, and death. In 1066, when William the Norman sailed to England, the "Mora" flew a flag at the masthead that had been blessed by the Pope, while astern floated a banner emblazoned with the three lions of Normandy. King Harold, too, had standards, in the last defence of which the English king was slain.

From the commencement of the use of flags the powerful aid of religion was enlisted to give sanctity to the national emblems. Bishops and abbots possessed banners of their own, not only for religious processions, but under which their retainers could fight. The Battle of the Standard in 1138 was so called because King Stephen fought against the Scots under the banners of St Peter of York, St John of Beverley, and St Wilfred of Ripon. These streamed from the top of the mast of a ship, which had been fixed

upon a wagon to be wheeled wherever the

fight was thickest.

When Richard, Cœur de Lion, sailed for the Holy Land in the Third Crusade, his ships flew the Cross of St George, a flag with a red cross on a white ground. From the King's own ship floated the royal banner, a rich red in colour and bearing the three golden lions-the arms of the Norman kings. St George was an early Christian soldier and martyr, and in the Church his day, 23rd April, was kept as religiously as Christmas Day. From this time onwards St George's Cross was the national flag for the English fleet. When Lord Howard of Effingham set out to give battle to the Spanish Armada, his ship, the "Ark Royal," flew four flags: (1) the Royal Standard of England; (2) the flag of Queen Elizabeth, showing the Tudor family arms; (3) the Howard family banner; and (4) the war ensign—the Red Cross flag of St George and this last was flying above every ship in the English fleet.

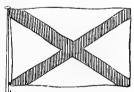
The accession of James I to the English throne necessitated a change in the national flag, because James had been king of Scotland for thirty-six years, and now the two



THE CROSS OF ST GEORGE



THE CROSS OF ST ANDREW

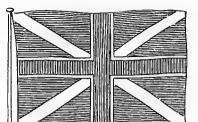


THE CROSS OF ST PATRICK

kingdoms were united. The Scottish national flag was the Cross of St Andrew, a white diagonal cross on a blue ground. The seamen of the English and Scottish navies quarrelled concerning the carrying of the two flags, which caused James to order the flags to be joined and blended into one. Thus came into existence the Union Flag, or "Jack," as it was called. Some claim that the word "Jack" came from Jacque (James), the name of the king who united the flags; but more likely it originated in Jacque, a surcoat emblazoned with St George's Cross. A harp was shown in the centre of the first Union Flag.

During the Commonwealth the Union Flag was taboo on

account of its monarchical associations. The Parliament adopted a flag of its own, but nevertheless the Cross of St George



THE UNION JACK OF 1603

was very prominent in its com-

position.

In 1801 the Irish Parliament became united with that of Great Britain, and to the Union Jack was added the flag of St Patrick, the patron saint of Ireland, a red diagonal cross on a white ground: and in this manner was completed the most famous flag that ever streamed.

The red cross of St George

extends from top to bottom and from side to side on a white ground; the red cross of St Patrick lies diagonally from corner to corner, for which the white cross of St Andrew forms the

ground. The field of the whole Union Tack is the blue of St Andrew's flag. The Union Tack is our national flag; it is the "Red. White and Blue," the "Flag of the Free"; it is the emblem of the power and might of the British Empire.

There is a right and a wrong way of flying the Union Tack. It should be noticed that the red diagonal arms of the flag have a narrow white band on one side of them and a broad one on the other. The broad one should be to the top of the flag on the side nearest the flagpost, that is the "hoist" of the flag, and towards the bottom of the flag in the loose end, or the



THE NAVAL FLAG OF THE COMMONWEALTH (Photographed from the original at Chatham Dockyard)

"fly" of the flag, as it is called. If the flag is flown upside down it is a signal of distress.

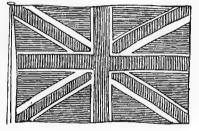
Now to consider various adaptations of the Union Jack, that are called "ensigns," and which are more commonly seen than the one in which the Union occupies the whole field. There are three ensigns, the red, white, and blue, which took their rise in the middle of the seventeenth century. These were red, white or blue flags, having the Union Jack in the top corner or "canton," next to the staff. In the case of the white ensign, in addition to the Jack, it bore the red St George's Cross, or, in other words, it was our first national flag with the Union Jack in the corner. This was the white ensign, which is still the flag of the British Navy.

In the old days a fleet was divided into three squadrons, each of which had its own ensign, the centre carrying a red flag, the van a blue, and the rear a white. There were nine classes, or degrees, of admirals. Commencing at the bottom, the lowest class was Rear-Admiral of the Blue, the next above was Vice-Admiral of the Blue, and above that Admiral of the Blue. The intermediate stages of promotion were Rear-, Vice-, and Admiral of the Red; and then succeeded Rear-Admiral, Vice-Admiral and Admiral of the White, which last was the highest rank of all. It became the

custom for all the ships of a fleet or squadron to fly the colour of the Admiral in command, his rank being denoted by the mast

at which the flag flew.

In the year 1864 the flag list underwent a great change, the ranks of Admirals being reduced to three. The Navy discontinued the use of the red and blue ensigns, retaining only the white; the distinguishing flag of an



THE UNION JACK OF 1801

Admiral is the St George's Cross at the main; a Vice-Admiral flies it at the fore; and a Rear-Admiral at the mizzen. To distinguish still further, the Vice-Admiral's flag bears a red ball in the near upper corner; the Rear-Admiral's ensign shows two balls. The highest distinction is that of Admiral of the Fleet, which title is held by less than a dozen persons, of whom His Majesty the King is the chief. The German Emperor, Czar of Russia, and several other European monarchs are honorary officers of this rank in our Navy. An Admiral of the Fleet flies a Union Jack at the main.

During the course of the ages the Royal Standard underwent various alterations. To the three lions of Normandy Edward III added the fleurs-de-lys, the lilies of France, by right of his claim to the French crown. James I added the single red lion of Scotland, and also the Irish harp, although Ireland was not politically united to Great Britain for another two hundred years. William III adopted the standard of the Stuarts, but in the centre he placed a golden lion rampant, the arms of Nassau. Anne reverted to the Stuart standard, but when George I came to the English throne

he added the arms of Hanover—two lions on a red ground for Brunswick, a blue lion rampant for Lüneberg, a galloping white horse for Saxony and the golden crown of Charlemagne. The Royal Standard is flown on a ship only when a member of the Royal Family is aboard.

In earlier chapters there have been various references to the honour of the British flag as connected with our claim to the dominion of the sea. It was decreed by King John that "if the governor or commander of the king's navie in his expeditions shall meet any ship whatsoever by sea, either laden or empty, that shall refuse to strike their sails at the command of the king's governor, or his lieutenant, but make resistance against them which belong to his fleet; that then they are to be reputed enemies if they may be taken, yea, and their ships and goods confiscated." That this was no empty claim was exemplified again and again in later times, notably by Howard, Blake and Monson, who insisted upon honour being done to our flag, even though the enforcement brought war in its wake.

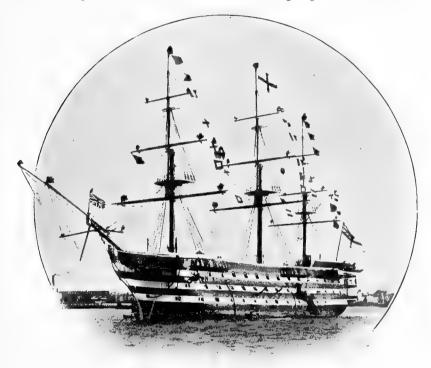
Closely associated with flags is the question of signals. Single flags are used to denote certain special conditions, e.g. a ship's ensign hoisted upside down is a signal of distress and a request for assistance, just as the ensign at half-mast is a sign of mourning. But by means of a flag code it is comparatively easy to give intricate orders and to maintain conversations at sea. In 1857 was published what was known as the Commercial Code, which in due course was adopted by all civilised nations, not only for their mercantile marines, but also for imperial purposes. This was an enormous advantage to seamen all the world over, for it enabled captains of different nationalities to speak to each other intelligibly. even though separated by miles of water. And this, too, although the captains face to face would be unable to understand a word of each other's language verbally. In addition to this international code all navies have their own private code for their own special use, when occasion calls for it. These codes are jealously kept; and they are frequently changed lest the signals may have become intelligible to foreign nations.

In addition to flag signalling we have also the semaphore system by day and the flashing lamp by night, both of which are more rapid than by means of flags. Within the last few years, however, wireless telegraphy has entirely revolutionised naval signalling. Vessels hundreds of miles apart can converse with ease by day or night. By means of "wireless" the Admiralty is kept informed daily of the movements of not only our own warships, but also those of foreign nations. There is not a single British warship afloat that is not in telegraphic touch with some other ship or a wireless station; and thus we have wireless communication encircling the whole globe. In the old times an

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enemy could play hide and seek on the world of waters, whereas nowadays every move is promptly known, nothing can be hidden long from the Government that owns a system of "wireless" which is world-wide.

Lack of space forbids dealing with the subject of signalling at greater length, and we will content ourselves with exhibiting the famous signal which Nelson hoisted before going into action at



H.M.S. "VICTORY"
(The famous old relic flying Nelson's memorable signal on Trafalgar Day)

Trafalgar. This signal that heartened and stirred our tars in the face of the enemy was not the signal of a moment or even a century. It remains a trumpet-call to every true-hearted Briton for all time. Mother Empire claims from each of her sons that he will do his duty in whatever walk of life he may be placed. Duty towards the Empire and honour to the Flag are not the prerogatives of the sailor and the soldier. In the street, the workshop, and the home we can by our daily lives honour the flag and respect the dignity of the nation. Honour is the breath of life of the

individual and the race, and it behoves one and all to assist in building up and conserving that magnificent heritage, which the thews and blood of our forefathers gained for us against the rivalry of the world.

A mighty realm is ours—an Empire of some 13 million square miles with a population of 440 millions, that includes practically every colour, race, and religion under the sun. On every sea are British ships stuffed with raw materials, or food for Britain's shores, or carrying her goods to the clamorous markets that will not be denied; and patrolling the trading routes are majestic ships-of-war ready to belch out flame and shot in Britain's cause. Never before in the history of the world has one small nation, occupying a detached fragment of one of the smallest continents, dominated so great a portion of the globe, and bound together, as with bands of steel, millions of alien peoples, who have come to love and reverence the glorious flag that floats over them, the flag that is the Briton's pride and joy, the admiration of a wondering world.

"It may trail o'er the halyards—a bullet-torn rag,
Or flutter in shreds from the battlement crag;
Let the shot whistle through it as fast as it may,
Till it sweep the last glorious tatter away.
What matter! We'd hoist the blue jacket on high,
Or the soldier's red sash from the spear-head should fly:
Though it were but a riband, the foeman should see
The proud signal, and own it—the Flag of the Free."

CHAPTER XXVIII

THE CLIMAX

At different periods in our history it has needed disaster to drive home to the nation the importance of maintaining the Navy in sufficient strength and in a state of constant preparedness to meet any sudden emergency. In the closing years of the reign of Edward III a series of almost unbroken successes led to naval slackness that permitted our power to wane while our rivals were straining every nerve to atone for their past misfortunes. The price we paid for the lapse was a ravaged southern coast and the total loss of a couple of fleets. Charles II starved the Navy and had the mortification of seeing some of the best ships in the service of the crown destroyed in the Thames. In later times, as set forth in our Articles of War, we recognised as a fundamental fact that:—

"It is upon the Navy that under the good Providence of God, the wealth, prosperity and the peace of these Islands and of the Empire do mainly depend."

"So successfully has the British Navy done its work," remarks Mr Arnold White, "that many generations of Englishmen have grown up without hearing the sound of a gun fired in anger. Every other nation in Europe has heard the tramp of foreign soldiery in the lifetime of men still living, and felt the pain and shame of invasion."

Our long immunity from the fear of an enemy within our borders, our long unchallenged supremacy at sea, naturally tended to breed a feeling of false security in the twenty odd miles of water that separate us from the Continent, almost forgetting the fact that our safety lies not in the water itself, but in the sure command of it. On the face of it there does appear to be little sense in building warships, that the rapidity of modern developments puts out of date and consigns to the scrap-heap without them having had to point a gun at an enemy. But it is an axiom that the best guarantee of peace is to be found in absolute preparedness for war.

In 1859 war between France and Austria drew forcible attention to Britain's necessity to prepare for eventualities, which took the form of a very few additional ships and the expenditure of



ADMIRAL SIR JOHN RUSHWORTH JELLICOE, K.C.B., K.C.V.O.,
COMMANDING THE HOME FLEETS

about £11,000,000 in coast fortifications that would prove almost useless if our Navy lost command of the sea, and were unnecessary as long as she retained it. Even ten years later we were trifling with our naval responsibilities, for in 1880-84, while we spent £8,194,000 in new ship construction, France was less than a million pounds behind us. The bombardment of Alexandria in 1882 created a greater interest in the Navy, but it was not until two years later that it was decided to spend 5½ millions sterling in adding to our strength a number of craft of the smaller types. The interest was more or less transient, for in 1887 the Government allotted only £2,819,000 for new construction, although the corresponding figures for France were £2,518,000, indicating a direct challenge that could not be ignored.

From that time matters moved more rapidly. In the same year was held a grand naval review at Spithead in honour of Queen Victoria's jubilee, but it was only a partial mobilisation and no real test of the war organisation of the Navy. A year later we assembled a large force of vessels in the Channel under a scheme of war training after a nominal sudden order, but informally the order had been known several weeks ahead. The naval exercises that followed were criticised in a report of a committee of three admirals. It was an arresting document that left no further excuse for parleying with our responsibilities. It was pointed out with sailor-like bluntness that by risking defeat of our Navy, we were endangering our place among the nations, with consequent loss of India and the Colonies, and that "no time should be lost in placing our Navy beyond comparison with that of any two Powers."

The country was roused: it was aflame; and no Government could ignore the public meetings that were held up and down the land. The direct result of the agitation was the decision to construct immediately 70 new warships, viz., 10 battleships of from 9000 to 14,000 tons, 9 cruisers of 7500 tons, 29 cruisers of 3400 tons, and nearly a score of gun-boats, etc. In passing the necessary measure through Parliament the Chancellor of the Exchequer explained that the wholesale increase in the Fleet was to make up for arrears and also to forestall the future. So far as the past was in question his admission was correct; so far as the future was concerned no mortal intelligence can forecast the Navy's needs for any great length of time. Lord George Hamilton, then First Lord of the Admiralty, declared that he had hoped that the "Nile" and "Trafalgar" would be the last battleships we should ever build in this country owing to the assumption that the torpedo would render armour-clad vessels obsolete; but he now agreed that "we may talk of our supremacy on the sea, but that supremacy is measured by the number of battleships we can put into line." One very important point of the First Lord's speech was his agreement with the "Committee of Three" that "our establishment should be on

such a scale that it should be at least equal to the naval strength of any two other nations." This was the "Two Power Standard"

that was our working basis for a number of years.

The time came when the British Admiralty had to consider the navies of countries other than France and Russia. Germany aspired to gain sea power more in consonance with her vast military organisations, and any marked increase in her Navy affected our outlook in the North Sea; Italy and Austria were building fleets that added to our responsibilities in the Mediterranean; and the United States across the Atlantic and Japan in the Far East were viewing powerful navies as vital necessities.

In 1894 the Admiralty's programme for a single year was the largest that had ever been adopted. Seven first-class battleships, six second-class cruisers, and two smaller ships formed the British reply to the expansion of the various Continental fleets, and that of France in particular. And during the next five years, 1895–1900, with Lord Goschen as First Lord, and Admirals Sir Frederick Richards and Lord Walter Kerr in succession as First Sea Lords, our Fleet attained a strength and supremacy such as never before had been attained.

In r895 the Jameson raid created trouble between Great Britain and the Transvaal Republic. The German Emperor congratulated President Kruger by telegram, a gratuitous interference to which our reply was a Special Service Squadron put into prompt commission. Germany's hope of territorial expansion in South America having been destroyed by the Monroe Doctrine, she had cast longing eyes on the South African Republics, and if she could come to be viewed as their protector, some time in the future they might establish a closer community of interest. It was distasteful to the Germans to be forced to realise that their influence in South Africa was practically nil until they possessed a larger fleet, and a Navy Act was passed that would materially increase their power afloat.

In 1899-1900, during the South African War, the Germans had to witness the imposing sight of the transport of a great British army to the Cape; and throughout a long and trying campaign our forces were fed and supported from the base 6000 miles away across the ocean—and notwithstanding Germany's aspirations in South Africa, she had to remain almost dumb and absolutely inactive, because at that time our command of the sea was unchallengable. One incident of the war, however, had far-reaching consequences. The German steamer "Bundestrath," being suspected of conveying munitions of war to the Boers, was stopped by British warships, which caused a blaze of resentment in Germany, and resulted in another Navy Act that would double the establishment provided by the former measure.

The new German Navy Act found us with Sir John Fisher acting

as First Sea Lord, and, reading German intentions correctly, and with the naval results in the war between Russia and Japan to guide him concerning the design of new ships requisite for our safety, he engineered the building of the first "Dreadnought," and the "Indomitable," "Inflexible," and "Invincible," at abnormal speed. Sir John's scheme was the rebuilding of the British Fleet. Improved destroyers were put in hand, and the rapid construction of submarines showed the First Sea Lord's faith in the new engines of warfare. Later the nation learnt to thank him for his iron purpose, and his determination that the Navy should not be starved in essentials; but it was not until August 1914 that we realised to the full how much British naval supremacy owed to Lord Fisher, who was raised to the peerage in 1909.

In the foregoing chapter we reviewed at some length and in considerable detail the capital ships that were added to our Navy both before and after the introduction of the "Dreadnought" type. It will not be amiss if we now compare British and German shipbuilding activities during various periods. The figures are more illuminative than words. They stand out as it were in fire,

a danger signal to our meanest intelligence :-

			Britain.	Germany.
1898-1902.	Armoured ships		38	12
	Destroyers		32	25
1903-1907.	Armoured ships		35	13
	Destroyers		42	39
1908-1913.	Armoured ships		20	19
	Destroyers		76	61

We witnessed another crisis in March 1909, when the Navy Estimates of £35,142,000 provided for only four Dreadnoughts. although the Government announced that it might be found necessary to make preparations for the rapid construction of four more armoured ships. The First Lord (Mr M'Kenna) in his statement to Parliament admitted that they did not know at what rate the Germans were building warships, but it was certain that during the last eighteen months construction had been greatly accelerated, and instead of nine ships of large size which we had calculated they would have completed in 1910, the actual number was thirteen. If Germany accelerated the completion of four Dreadnoughts provided to be laid down in 1910-11, as she had the previous quartette, he calculated that she would have seventeen Dreadnoughts in April 1912 as against our twenty. In criticising the Government proposals, Mr Balfour reckoned that Germany might have twenty-one or even twenty-five Dreadnoughts to our twenty in April 1912. During the discussion it was announced that during the last year (1908) Krupp's had increased their employés by no less than 38,000 men, which pointed to a huge develop-



(The muzzles of the forward guns covered during the operation of coaling)

ment of gun-mounting plant, that would make for the rapid completion of ships. Eventually it was made quite clear that Germany could build Dreadnoughts as rapidly as Britain; in 1908 she had laid down or ordered at least six Dreadnoughts to the British two; in the last three years she had laid down eleven large armoured ships to our eight. It was proved that the future command of the sea would depend on Dreadnoughts. If we could not obtain information concerning Germany's armaments, there was the danger that, even if the German ships were fewer in number than ours, they still might be of a superior type. The Government could do no less than give the benefit of the doubt to the side of our national safety, and shortly it was announced that four additional Dreadnoughts would be laid down.

Throughout this volume of naval annals we have made a point of supplying brief political links to show the cause and the object of our warlike operations; but the European cataclysm of 1914

cannot be dismissed in a few words.

In our outlook upon Europe for a long period, we had maintained an attitude of what was termed "splendid isolation." Relying upon our geographical position as an island, we judged that we might pursue our Empire course in peace and ignore the contentions and strifes of the rest of the world, always subject of course to our retention of supremacy at sea. But new conditions rendered it desirable to modify our policy. The significance of Germany's increasing naval armaments was unmistakable, and during the South African War it was made plain to us that various of the Powers might take sides against us in the event of any general European conflict. We therefore sought to make friendly alliances that might stand us in good stead if ever we were called upon to engage in a struggle for our national existence. This new policy of the Government was aided largely by the tact and aplomb of King Edward VII, notably in visits to France and Russia which laid the foundations of a thorough understanding with those countries, that afterwards developed into the Triple Entente, which was the antidote to the Triple Alliance formed by Germany, Austria and Italy, although the two latter were by no means ideal partners.

With the growth of her Navy Germany speedily showed that she intended to make good her claim to world power, and to put into effect the Kaiser's avowed policy that "the trident must be in my fist; nothing must happen in any part of the world without my leave." At different times the self-styled "War Lord of Europe" declared: that "there is only one law and that is the law I lay down"; "German colonial aims can only be gained when Germany has become master on the ocean"; and "I will never rest until I have raised my Navy to a position similar to that occupied by my Army"—and all the time German writers gave vent to inspired pronouncements that the main task of Germany was "to

subdue England to such an extent that her influence all over the world is broken for ever," and that as "the nineteenth century saw a German Empire; the twentieth century must see a German world."

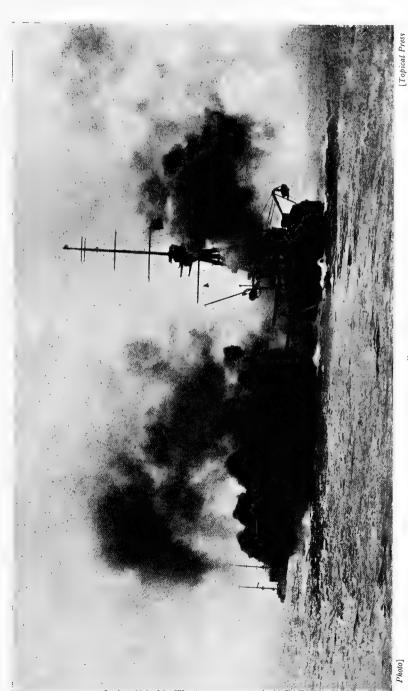
In 1905 Great Britain and France came to an agreement whereby we were left to the untrammelled occupation of Egypt, while similarly France could develop her interests in Morocco; and incidentally it may be said that at the same time we mutually agreed upon various other matters in different parts of the world that had caused friction in the past. Germany complained that she had been ignored, and Wilhelm II himself landed at Tangier to give his personal support to the Sultan of Morocco in his claim for a conference of the Powers. A conference was held at Algeciras in January 1906, and France made good her claims, largely owing

to the unwavering support of Britain.

Three years later the Kaiser put his unceremonious finger into another political pie by backing up Austria's annexation of Bosnia and Herzegovina, well knowing that her recent disastrous war with Japan would not permit Russia to resort to arms in support of her objections to the aggression of Austria. This distinct exhibition of German power encouraged the Kaiser to renewed interference in Morocco in 1911, upon the plea that the French occupation constituted a new situation that necessitated Germany receiving some compensation. For a time the tension was very acute, but in the end France retained Morocco by ceding to Germany about 100,000 square miles of territory in the Congo basin. Before the year was over Italy went to war with Turkey, from whom she wrested Tripoli and Cyrenaica. It was never quite clear why Italy took up arms, but the result strengthened the importance of a member of the Triple Alliance. If Germany had no hand in instigating the war, she at least tacitly approved of it, although apparently she was on markedly friendly terms with Turkey. Doubtless she viewed Italy's expansion as a counterblast to the French occupation of Morocco.

The year 1914 henceforth will be considered as one of the most notable epochs in the history of the world. It was on Sunday, 28th June, when a cloud no bigger than a man's hand appeared on the political horizon of Europe. In Sarajevo, the capital of Bosnia, the Archduke Francis Ferdinand of Austria and his consort, the Duchess of Hohenberg, were assassinated by a couple of young Servians. The inquiries of the Austrian police, together with the admissions of the murderers, supported the belief that the outrage was hatched in Belgrade in revenge for Austria's successful opposition to Servia being awarded a port in the Adriatic at the conclusion of the Balkan War; and it may be borne in mind that Servia's success against Turkey had put an end to the Austrian dream of

extending her dominions to the Ægean Sea.



(It was on this vessel that Prince Albert served in the North Sea in August 1914) H.M.S. "COLLINGWOOD" FIRING 12-INCH GUNS

The sympathy of the whole civilised world went out to Francis Joseph, the aged emperor of Austria, in the loss of his heir by a hateful outrage. Every nation of Europe admitted the justice of Austria's demand for reparation by Servia. But the latter's official cognisance of the plot was not proved sufficiently to justify the humiliating terms required by Austria. To the main demands Servia gave way, but two debatable points she desired to be referred to arbitration. Austria's reply was to make immediate preparations for war, followed by the bombardment of Belgrade on 30th July. European peace was promptly thrown into the melting-pot. Russia ordered a general mobilisation in support of Servia. On 1st August Germany declared war upon Russia and invaded Luxemburg. A day later German troops entered France at Cirez and the Kaiser sent an ultimatum to Belgium. It was the Kaiser who applied the torch to the powder magazine of Europe; but for his malign influence over Austria there was no doubt that Austria, Servia, and Russia would have come to some amicable understanding. The day had arrived to put into practice the long-expounded German gospel of the mailed fist and naked force.

Although four great Powers and a smaller country had let loose the dogs of war, those of Britain still remained on the leash. Even at the eleventh hour they might be saved from entering the fray. The decision rested with France and Germany. In 1839 most of the European Powers (Britain, France and Prussia among them) guaranteed the neutrality of Belgium. Now that Germany and France were at war we desired pledges from them that they would respect Belgian rights. While France gave a frank assurance that she would not ignore her treaty signature, Germany would give no undertaking. She was willing to promise that she would not rob Belgium of her independence after the war and would compensate her for any damage caused by a German army traversing or occupying the country. Further, to secure our neutrality Germany would undertake not to exact any territory from France as one of the spoils of victory.

Neither promises nor bribes, however specious, could induce Britain to wink at the violation of a treaty to which she was a party; she could not waver from her plainest duty to guard the liberty of a smaller state. On 4th August German troops attacked

Liège, and that same night we declared war on Germany.

Apart from our solemn promise and duty towards Belgium, as signified in the treaty of 1839, which the German Chancellor contemptuously styled "that scrap of paper," the *Entente Cordiale*, our friendship, duty and interest demanded our support of France against her old enemy. The crushing of France would imperil our national security; it would enable our greatest rival for naval supremacy to plant herself upon our very threshold; possibly it

would eventuate in Antwerp, Rotterdam, Flushing, Dunkirk, and

even Calais becoming German ports and naval bases.

Several times in her history Britain has drawn the sword and cleared her decks against royal bullies who sought to dominate Europe, as a preliminary to a world empire. Napoleon, the last of these disturbers of the world's peace, only required the mastery of the sea for a few hours to gratify his over-weening ambition; but the wooden walls of England, streaming the meteor flag, withstood the tyrant and paved the way for his downfall at Waterloo.

The titanic struggle into which Europe was plunged involved seven armies with a total of more than 20,000,000 men. The mind reels at the mere contemplation of such huge numbers, and for comparison our thoughts may revert to the battle of Waterloo, in which the combatants numbered less than a paltry 200,000. The following is an approximate analysis of the armed forces of the

nations in the quarrel :-

				First Line Men.	Total War Strength.
Great Britain			٠.	200,000	750,000
France				I,400,000	4,000,000
Russia				2,750,000	6,000,000
Belgium				55,000	300,000
Servia				50,000	300,000
Germany				1,500,000	4,500,000
Austria		. '		1,800,000	3,500,000
					19,350,000

Before the war was a month old Japan had entered the fray, but her army of 750,000 men did not affect the European operations. Russia could call up further reserves of about 3,000,000 men. Italy was standing aloof from the Triple Alliance, but at any time might enter the conflict with 2,000,000 men. The resources of Great Britain are difficult to assess, for quickly contingents of Canadians and Australians were speeding to assist the Motherland, and India was sending a large expeditionary force of native troops to fight in Empire's cause for the first time in Europe.

Our prime interest being concerned with the naval aspects of the war, we will at once compare our strength at sea with that of Germany, so far as the bigger ships and guns, are concerned, together

with destroyers and submarines:-

			Britain.	Germany.
Super-Dreadnought Battleship	ps		II	
,, Battle-cr	uisers		3	
Dreadnought Battleships			13	13
,, Battle-cruisers			5	5
Total Dreadnoughts			32	18

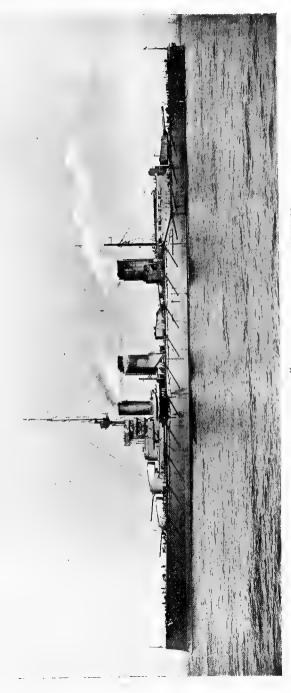
		Britain.	Germany.
Pre-Dreadnought Battleships .		38	22
Armoured and Protected Cruisers		49	40
Destroyers		227	152
Submarines		75	35

The value of our fourteen Super-Dreadnoughts lay not merely in their number but in the fact that they were armed with 13.5 inch guns, a weapon more powerful than could then be found to-day in any foreign Navy. If we compared the respective strengths of Britain and Germany expressed in figures of broadside, and excluding guns under 6-inch, we had 347 guns to Germany's 143. If we took into account ships then building, we had it upon the authority of the First Lord of the Admiralty that during the twelve months following the outbreak of the war the number of great ships to be completed for our country would be more than double the number completed for Germany, and the number of cruisers three or four times as great. This cheering statement bore out the reassuring note struck by the Navy League in a message to the nation: "In the adequacy of supplies, equipment, ammunition, and fuel, and above all in the loyalty and devotion of officers and men, the Navy stands at a higher level than at any time in our history. It is ready for the service of its country in the full confidence that it can bear the burden imposed upon it."

Upon the declaration of war the British Grand Fleet under Sir John Jellicoe promptly took its station in the North Sea adjacent to the German coast, either to meet the German Fleet in open conflict or to keep it locked up in their ports and the Kiel Canal, the great strategic channel which Germany constructed in 1890,

between the North Sea and the Baltic.

With a stroke of the pen the British Government had added two fine battleships to the Navy. At Elswick a notable vessel was launched in 1913. Originally she was laid down for the Brazilian Government, who sold her before completion to Turkey. Under the name of "Osman I." she was ready to leave for Turkish waters when the British Admiralty added her to our own Fleet, notwithstanding the protests of the Porte. With a displacement of 27,500 tons she was the largest completed warship in the world, and on her trials she made 22 knots. The "Agincourt," the third name she has borne, is unique in her main armament, which consists of fourteen 12-inch guns, which are mounted in seven double centre-line turrets, permitting all fourteen guns to be fired on either broadside. The secondary battery mounts twenty 6-inch quickfirers, and there are sixteen smaller quick-firers and three torpedo tubes. Amidships the armour is 9 inches, but reduced to 6 inches and 4 inches at the ends. The turrets are protected by 9-inch armour plate and the secondary guns by 6-inch plating. The bunker



H.M.S. "QUEEN MARY" -- SUPER-DREADNOUGHT CRUISER

capacity is 3500 tons. This huge vessel requires a complement of 1100 officers and men, and her total cost was nearly £2,700,000. At Barrow the Turkish Government had the "Reshadieh"

At Barrow the Turkish Government had the "Reshadieh" very near completion. She was launched in September 1913; her displacement is 23,000 tons, and her turbines of 31,000 horse-power afford a speed of 21 knots. On the whole her design is very similar to the "Iron Duke" class. The armament consists of ten 13.5-inch, sixteen 6-inch and four 12-pounder guns; the submerged torpedo tubes are four in number. The heavy guns are mounted in five double turrets on the centre-line, and all ten weapons can be used on either broadside. The main armour belt is 12 inches thick, the turrets are armoured similarly, while the secondary battery is protected by 5-inch plates. The price paid for the "Erin," as the new vessel was named, was not made public at the time she was taken over, but in the circumstances she would be worth every penny our Government paid for a useful and un-

expected addition to our strength.

Thanks to the Admiralty's brilliant conception of the probable trend of events, the British Fleet was mobilised forty hours ahead of the declaration of war. If any nation on earth bitterly recognised the meaning of sea power, surely it was Germany. Her naval policy always had been to take the offensive, to strike a shattering blow while we were yet unprepared. Fate played the Germans a scurvy trick. It was Vice-Admiral Friedrich von Ingenohl, commander of the German High Seas Fleet, who was unprepared, with his ships without war stores cruising in peace formation off the coast of Norway. Offensive naval tactics were not for the Kaiser, all that his boasted fleet could do was to hasten home and skulk in port, while Britain put a strangle grip on German commerce. Within but a few days the German mercantile marine had disappeared from the face of the waters. When hostilities commenced there were 2000 German steamers affoat, aggregating some 5,000,000 tons gross, and to these could be added about 2700 sailing ships, generally of small size. The moment that the British Admiralty flashed its wireless messages to the Fleet, the German mercantile marine was homeless; and all that could be done was for those ships in neutral ports to remain there, while others ran for neutral shelter. In quite a short time about 400 German ships totalling some one and a quarter million tons had been captured by British cruisers or detained in British home and Colonial ports, while only 86 British ships of 229,000 tons were in German ports or had fallen to the few German cruisers that were at large, chiefly off South America or in West Indian waters, while one roamed the Indian Ocean and another the Pacific. The hostile commerce destroyers, however, did not dare show themselves on any of the main shipping routes, and thus had to content themselves with comparatively small craft for victims; and while every



(Built at Elswick for the Turkish Government, but taken over by the British Admiralty, upon the outbreak of war with Germany, August 1914)

British capture meant the realisation of the value of the cargo and the enlistment of another vessel under our own flag, German cruisers could only destroy their prizes, entailing loss to us but no

profit to themselves.

The war was only a day old (5th August) when H.M.S. "Amphion," a light cruiser, accompanied by a flotilla of destroyers, encountered the German mine-layer "Königin Luise" off the Dutch coast some sixty miles from Harwich. She was formerly a 2000-ton passenger steamer of the Hamburg-Amerika line, with a speed of 20 knots. She had been specially fitted for mine-laying, and was caught red-handed sowing her vile spawn indiscriminately in the open sea to the danger of shipping, whether warship or merchantman, foe or neutral. Sowing submarine mines outside their own territorial waters was a new custom in warfare, and while in accord with German ethics, was not likely to commend itself to any self-respecting nation. The destroyer "Lance," only recently added to the Fleet, put an end to the despicable career of the "Königin Luise," which by the by had been painted so as at a distance to resemble a Hook of Holland or a Flushing packet boat. With four shots the British gunners smashed the mine-layer's bridge, tore away her stern, and sent her to the bottom in six minutes. And then, in accordance with the humane traditions of the British Navy, the flotilla lowered boats and saved about 120 of the German crew from drowning.

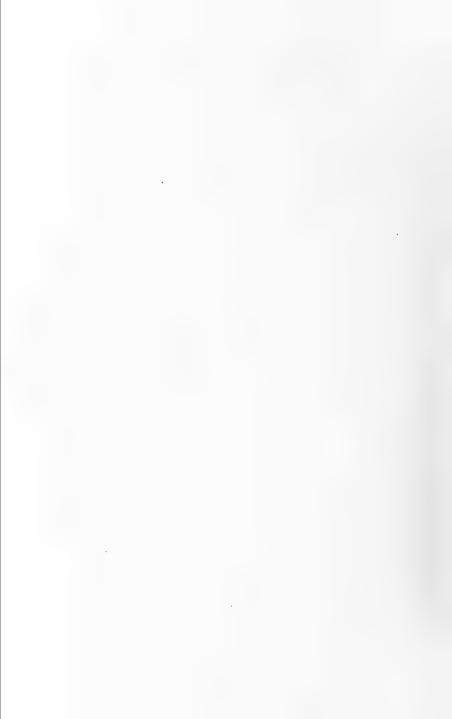
Although the "Königin Luise" lay at the bottom of the North Sea, there was no telling how many of her vile death machines she had left lurking some few feet beneath the surface of the waves awaiting contact with unsuspecting victims. A day later the whereabouts of one mine was disclosed, for the "Amphion" struck it about thirty miles off Aldeburgh. The following is the Admiralty's

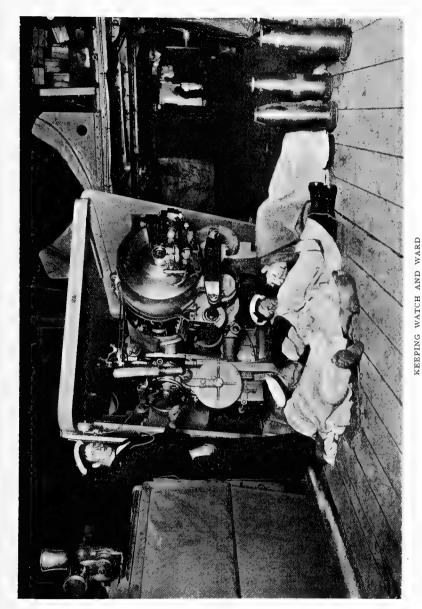
official story :--

"A sheet of flame instantly enveloped the bridge, which rendered the captain insensible, and he fell on to the fore and aft bridge. As soon as he recovered consciousness he ran to the engine-room to stop the engines, which were still going at revolutions for twenty knots. As all the fore part was on fire it proved impossible to reach the bridge or to flood the fore magazine. The ship's back appeared to be broken, and she was already settling down by the bows. All efforts were therefore directed towards placing the wounded in a place of safety in case of explosion, and towards getting her in tow by the stern. By the time the destroyers closed it was clearly time to abandon ship. The men fell in for this purpose with the same composure that had marked their behaviour throughout; all was done without hurry or confusion, and twenty minutes after the mine was struck the men, officers, and captain left the ship. Three minutes after the captain left his ship another explosion occurred, which enveloped and blew up



H.M.S. "BIRMINGHAM" DESTROYING THE GERMAN SUBMARINE "U 15," AUGUST, 1914.





(Gunners asleep, but ready for instant action on the word of the watch)

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the whole forepart of the vessel. The effects showed that she must have struck a second mine, which exploded the fore magazine. Debris falling from a great height struck the rescue boats and destroyers, and one of the 'Amphion's' shells burst on the deck of one of the latter, killing two of the men and a German prisoner rescued from the cruiser. The afterpart now began to settle quickly, till its foremost part was on the bottom and the whole afterpart tilted up at an angle of 45 degrees. In another quarter of an hour this, too, had disappeared. Captain Fox spoke in high terms of the behaviour of officers and men throughout. Every order was promptly obeyed, without confusion or perturbation."

On Sunday, 7th August, one of the cruiser squadrons of the main British Fleet became aware that a submarine flotilla was concerting an attack. An opportunity was in the making to contest Sir Percy Scott's opinion that torpedoes and submarines would in future rule the naval roost. Taking into consideration that the "deadliest thing that keeps the sea" heralds its approach by no more than its periscope and the attendant ripple, the detection of the enemy while at a safe distance indicated almost abnormal keenness on the part of the look-outs. The cruisers kept on their course, giving no indication to the enemy that they had been discovered until a periscope showed itself within the danger zone of H.M.S. "Birmingham." Although steaming at full speed, she fired a shot, not at the sunken body of the submarine just beneath the protecting wave cushion, but aimed at the thin line of the periscope. Notwithstanding the smallness of the mark the periscope was shattered, and the submarine, rushing along under the water, was a sightless thing in momentary peril of certain destruction from collision with one of the cruisers. Her consorts had made off with all speed lest a similar fate overtook them. The sightless submarine had perforce to rise to the surface, and as the dark conning tower showed itself, a "Birmingham" gun spat out another shot that ripped up the whole of the upper structure. There was just time for the number of the victim (U15) to be distinguished, and down she sank like a stone. In this early test of the submarine as the arbiter of naval conflict, doubtless Sir Percy Scott's critics took credit to themselves for their prescience.

By 16th August the landing of the British Expeditionary Force in France was completed satisfactorily without any attempted interference by the enemy. If anyone doubted that the North Sea had been swept clear of German warships surely here was indubitable proof. "We cannot imagine that under similar circumstances any British admiral would have hesitated to make a dash for the crowded transports that crossed from England to the Continent; even if only a couple of destroyers could have got through the cordon they might have covered themselves with glory." This was the opinion expressed by a writer in one of the daily

newspapers. We may be sure that the Navy had formed more than one cordon, and that the fact that no attempt was made was less a reflection on German pluck and enterprise than a testimonial

to the effectiveness of Sir John Jellicoe's dispositions.

Notwithstanding British watchfulness two German cruisers and four destroyers contrived to sink fifteen British fishing boats north-east of the Dogger Bank. The Admiralty announcement tersely and sarcastically announced that the enemy had captured a quantity of fish, and the fishermen crews were taken to Wilhelmshaven as prisoners of war. This inglorious feat was little better than the dastardly laying of mines that by this time had blown up quite as many neutral ships as those for whom the mines were specially intended. How different was Robert Blake's treatment of the Dutch fishermen in 1652 (p. 134). It was beneath the dignity of a British admiral to deprive poor men of their means of livelihood, even though they were breaking the law by fishing in forbidden waters.

One of the few German armed ships at large was the "Kaiser Wilhelm der Grosse" (14,000 tons). This famous mail steamer of the Norddeutscher Lloyd Company in the autumn of 1897 created a sensation in the shipping world by snatching from Great Britain the speed championship of the Atlantic, which she crossed at an average of 221 knots an hour. Although since that time bigger and faster vessels have appeared, and the blue ribbon again reverted to Great Britain, the "Kaiser Wilhelm der Grosse" still remained among the first-class ocean greyhounds; and as the Germans had armed her with ten 4-inch guns, she was capable of working no little damage as a commerce destroyer. She had, in fact, destroyed the "Kaipara," 7392 tons, and the "Nyanga," 3066 tons. In each case she removed the crews and then sank the ships, but we were forced to admit that the captain of the German cruiser carried out his duties with humanity and restraint. On 27th August the German vessel was replenishing her bunkers from the collier "Arucas," off the Oro River on the West Coast of Africa, when the British cruiser "Highflyer," captain H. T. Buller, M.V.O., put in an appearance. Although the British vessel was not half the tonnage of the German, her main armament of eleven 6-inch guns more than counterbalanced lack in bulk. Captain Buller gave the enemy an hour to clear, and the prisoners aboard the German ship were transferred to the collier, together with a portion of her own crew, only retaining the officers, gun crews and a few engineers. The "Highflyer" opened fire while four miles distant and while the collier was still connected by the hawser, which was speedily cut, so that the "Arucas" could get out of danger. The British lyddite shell was soon playing havoc with the German upper decks, but the ocean greyhound replied spiritedly, hitting the "Highflyer's" bridge and knocking



(Sank the German Cruiser" Kaiser Wilhelm der Grosse," 27th August 1914)

the searchlight apparatus into the sea. As the range got less, the "Highflyer" simply shattered the side of her opponent, and she listed to port as the water poured in through the holes made by the shells. Gradually she heeled over and sank in nine fathoms of water. Several boat loads of her men got away and reached the shore in safety.

"Now listen all ye sailors bold,
Whose hearts are cast in honour's mould,
While I the story do unfold
Of the saucy 'Arethusa.'"

This verse from a rollicking old sea song celebrates a naval success of 1778, although there had been an "Arethusa" even before that time. In all, five of our ships have borne the name, and among them they contrived to get themselves into the naval limelight to the extent of about two dozen actions of one kind or another; but probably none of them ever excelled the spirited doings of the last of the famous name, that was added to our Navy only just upon the brink of war. She was the first put into commission of the twenty of her class under construction, and carried

the broad pennant of Commodore Tyrwhitt.

Two destroyers by extraordinary daring and enterprise had penetrated into the enemy's waters in the neighbourhood of Heligoland, the island stronghold of Germany, and thus discovered the path that was kept free from mines. With this useful information to guide them Rear-Admirals Sir David Beatty, A. G. H. W. Moore and A. H. Christian, and Commodores Goodenough, Keyes and Tyrwhitt put into execution a raid upon the enemy. For this bold exploit the vessels employed were light cruisers, destroyers and submarines, watched over by the Battle Cruiser Squadron. It was a plan that would have warmed the hearts of our tars of old, who delighted in cutting out ventures, for the present object was to cut off the German vessels that guarded the approaches to their coast, and then deal with them in the open sea.

The "Arethusa" led the way towards Heligoland, and in the mist a couple of destroyers had got within the enemy's lines, when they were discovered by a waterplane, whose pilot gave the warning that brought up German cruisers and destroyers to ward off the danger. At only 2000 yards range the "Arethusa" engaged two cruisers, which she drove off with severe damages to one of them. Later in the morning the "Arethusa," along with the cruisers "Fearless," "Amethyst," and "Liverpool," and the destroyers "Phœnix," "Druid," "Laurel," "Defender," and "Laertes," bore the brunt in some rather confused fighting. With her 6-inch guns the "Arethusa" swept the German protected cruiser "Mainz" (4280 tons) from stem to stern, and speedily sank her. About twenty of the enemy's vessels were rounded up, and even our



(It was formally ceded to Germany by Great Britain in 1890 in consideration of concessions in East Africa) HELIGOLAND, AN ISLAND IN THE NORTH SEA, THIRTY-SIX MILES N.W. OF THE ESTUARY OF THE ELBE

destroyers did not hesitate to fling themselves into the fray against much heavier craft. Two German destroyers went to the bottom, whether from guns or torpedoes it is impossible to say, and others only escaped by precipitate flight. The British light cruisers naturally did not escape damage and the "Arethusa" was rather badly mauled. The coming up of the Battle Cruiser Squadron put the seal upon the German discomfiture. A shot from the "Lion" (flagship of Sir D. Beatty) penetrated the boiler-room of the "Ariadne" (2620 tons), putting half her boilers out of action and reducing her speed to 16 knots; shortly her stern was ablaze and she sank. The "Köln" (4280) tons was also battered to such an extent that she subsequently sank.

A naval lieutenant afterwards gave a vivid account of the destruction of the "Mainz." "She was reduced to a piteous mass of unrecognisability, wreathed in black fumes from which flared out angry gusts of fire, as an unending stream of 100-lb. shells burst on board. The last I saw of her she was absolutely wrecked alow and aloft, her whole midships a flaming inferno. She had one gun forward and one aft still spitting forth fury and defiance, like a wild cat mad with wounds."

In this brilliant "scrap" in the Bight of Heligoland perhaps the most dramatic episode was in connection with two of the "Defender's" boats that had been lowered to pick up Germans who were struggling in the water. Owing to the approach of a German cruiser, the British destroyer had to leave her boats, containing one officer and nine men, to their own devices. It was not an inspiriting outlook, for they were twenty-five miles from the nearest land, and that was the enemy's fortress. Suddenly to their amazement there was a swirl alongside and up popped his Britannic Majesty's submarine E4. The ten thankful tars went aboard her by way of the conning tower, whereupon E4 dived and carried them home a distance of 250 miles. Shades of Jules Verne

In addition to the German vessels known to have been lost, and quite 900 men of their crews perished with them, the remainder of the enemy's ships suffered severe punishment and their casualties must have been correspondingly heavy. The British losses were sixty-nine killed and wounded, among the former being Lieutenant-Commander Nigel K. W. Barttelot and Lieutenant Eric W. P. Westmacott, two officers of exceptional merit and promise. Among the three hundred prisoners picked up by our boats was the son of Admiral Von Tirpitz, Secretary of State for the German Navy.

-but quite true!

The villainous mines strewn in the North Sea still continued to find victims. The steam drifter "Linsdell" struck a mine thirty miles off the East Coast and sank. H.M.S. "Speedy," an old torpedo boat built in 1893, picked up the drifter's crew, with the exception of the skipper and four men who were lost. Half-

an hour later the "Speedy" also struck a mine and sank, with the loss of one man and two injured. About the same time a Swedish steamer and three English trawlers were lost from the same cause. Our fishing fleets had then lost nine vessels by mines in addition

to those sunk in the raid by German warships.

On 5th September H.M.S. "Pathfinder" sank in the North Sea, with a loss of 259 lives. At first she was thought to be another mine victim, but it was afterwards ascertained that the destruction was effected by a torpedo, although it was a matter of doubt how it had been delivered. Even before the dense black smoke of the explosion cleared, the stricken vessel was settling down, and as her boats had been smashed, nothing could be done for the maimed and dying. True to the traditions of the Navy there was no panic, and when the order was given to jump, those who were able clutched and hung on to wreckage until torpedo boats, racing against time, came to their assistance.

In 1905 the Cunard Line floated the "Carmania" of 19,000 tons, and capable of carrying 10,000 tons of cargo and about 2600 passengers. She was driven by three turbines working as many screws, and was really an experiment to ascertain the type of ship that would regain for us the championship of the Atlantic. Notwithstanding the advent of various passenger leviathans, the "Carmania" has remained a popular vessel. On 14th September, armed as an auxiliary cruiser, Captain Noel Grant, R.N., the liner went into action off the east coast of South America with the "Cap Trafalgar" (18,710 tons) of the Hamburg-South American Company. The "Cap Trafalgar" was the fourth German armed liner that had been captured or sunk within twenty-one days, but the previous three had fallen to ordinary British cruisers. The German was armed with eight 4-inch guns and pom-poms and fought doggedly for 13 hours, when she capsized and sank, her survivors being rescued by an empty collier. This gallant exploit of one of our armed liners elicited a telegram of congratulation from the First Lord of the Admiralty.

From the commencement of the war British submarines made energetic efforts to justify their existence. Some of them had caused considerable anxiety in the flotilla by being absent from home for four days at a stretch, but in each case returning in safety. One of these craft approached a vessel flying the white ensign and only just in time discovered that she was a hostile vessel in disguise. The submarine dived and remained below for several hours, during which the crew passed the time in playing bridge, varied by selections on the gramophone. When the submarine ascended and poked out her periscope, the enemy was still on the watch, so the naval duck effected a record dive, and not until dusk did she venture again to the surface to find the coast clear for a race home

with valuable information.

Our "E" class of submarines, the newest and most powerful in the Navy, displace 810 tons. They have a radius of 2000 miles and can remain under water for a whole day. Each can accommodate in fair comfort a crew of twenty-eight. The armament consists of four tubes, firing 21-inch torpedoes, and two 12-pounder

guns.

Submarine "E9" claims the credit of being the first of her kind to score a victory with her torpedoes. In charge of Lieutenant-Commander Max K. Horton, she accompanied another submarine on a visit to the German coast to the south of Heligoland. Encountering the German cruiser "Hela" (2000 tons), the two submarines stealthily pursued her until "E9," getting within range, dived and fired two torpedoes, one striking the cruiser's bow and the other catching her amidships. Judging from the sound that she had found the mark, "E9" ascended for a peep, and ascertained that the "Hela" was in extremis. The submarine dived again, and after a suitable interval rose once more to make sure that her work was completed. The cruiser was not to be seen, so that there was little doubt concerning her fate; and shortly the German naval authorities announced that their list of small cruisers was one short.

We were shortly to have another painful example of the perils cheerfully endured by our sailors in keeping control of the seas and ensuring the safety of the Motherland. On 22nd September, in the North Sea, we lost three 12,000-ton armoured cruisers, the "Aboukir," "Hogue," and "Cressy." The vessels were of a comparatively old type, and their loss affected neither the disposition nor the supremacy of the British Grand Fleet. The sacrifice of life was deeply regrettable, but one of those inevitable prices of Admiralty that have to be paid, as we have paid in full many a time in the past. The three cruisers were steaming in line ahead on patrol duty, when they saw a number of fishing boats, one of which was engaged in laying mines, thus revealing at least one method by which the enemy effected the devilish work. 5000 or 6000 yards range one of the cruisers opened fire and sank the miscreant ship. Suddenly there was a violent explosion underneath the "Aboukir" that quite lifted her bows out of the water. Naturally it was concluded that the sinking vessel had struck a mine, and not until the "Hogue" and "Cressy" were lowering boats to go to the assistance of the survivors was it discovered that the British ships were the object of a submarine attack. The cruisers' guns commenced to bark as an enemy disclosed itself. That there were several submarines was certain, but not half a dozen, as some of the survivors believed. The "Hogue" and "Cressy," having slowed down to engage in the work of rescue, rendered themselves an easier prey to the marine ghouls. A torpedo struck the "Hogue" near the magazine. A terrific double



H.M.S. "ABOUKIR"

(Sunk in the North Sea by a German submarine, 22nd September 1914)

explosion followed, that shattered the ship, which sank in six minutes, and threw an additional number of men struggling in the water for their lives.

Meanwhile the "Cressy" was firing furiously all round at the submarines, from whom she could easily have escaped by going full steam ahead instead of still going slowly in order to pick up as many men as possible. Before the "Hogue" was struck her gunners claimed to have hit one submarine, and it is probable that the "Cressy" answered for another before she, too, fell a victim, heeling over from a torpedo that struck her stern, followed

by another that sealed her tate completely.

Upon this dread occasion was exhibited the magnificent coolness for which British seamen ever have been famed. In each case they lined up on deck in perfect order in readiness to take the plunge. Some of the survivors of the "Aboukir" swam to the "Hogue" and got aboard, only, after a brief interval, to have to take to the water again to swim to the "Cressy," which in its turn proved to be no haven, and once more the victims were at the mercy of the sea. Aboard the three cruisers were twenty-seven naval cadets whose ages ranged from fifteen to sixteen and a half years. Some of them were at school only a few weeks before they were called upon to face an ordeal that well might have appalled the stoutest heart. Cadet Wykeham Musgrave was one who had the unique experience of having three ships torpedoed under him. Twice he escaped death after the explosion by being a very capable swimmer, and at the last he managed to cling to a piece of floating wreckage until he was picked up. In the final work of rescue two Dutchmen, Captains Voorham and Berkout, of the "Flora" and "Titan" respectively, risked mines and submarines and succeeded in picking up 400 survivors, whom they conveyed to Holland. Captain Phillips and his crew of the trawler "Coriander" rendered splendid assistance in the rescue of 156 officers and men.

The loss of the "Aboukir" was one of the ordinary hazards of patrol duty, but her consorts were sacrificed because of the natural and humane desire to save life. This caused the Admiralty to announce that in future rescue work must be done by small craft and not by cruisers, whose slowing down may place themselves in jeopardy. "The loss of nearly 60 officers and 1400 men," said the Secretary of the Admiralty in an official statement issued to the press, "would not have been grudged if it had been brought about by gun-fire in an open action; but it was peculiarly distressing under the conditions which prevailed. The absence of any of the ardour and excitement of an engagement did not, however, prevent the display of discipline, cheerful courage, and ready self-sacrifice among all ranks and ratings exposed to the ordeal." Commander Norton of the "Hogue," in his report to the Admiralty, wound up by requesting that he should be appointed to another

ship as soon as he could get a kit. Verily our seamen of to-day are chips of the old sea dogs who fought their fights without the aid of the murderous inventions that mark modern warfare.

In a public speech the First Lord of the Admiralty remarked that if the German Fleet would not come out and fight, it would be necessary "to dig them out like rats out of their holes." Not satisfied with his exploit against the "Hela," Lieutenant-Commander Max K. Horton of submarine "E9" must do something to show how the First Lord's prediction might come true. Betaking himself to a spot off the mouth of the Ems River, the gallant Lieutenant-Commander found an opportunity of launching two torpedoes at the German destroyer "S126." The first shot was a miss, but the second missile struck the enemy amidships and literally tore her in two. A second destroyer that was near at hand did not stay to try conclusions with the raider. Having accomplished her mission, "E9" returned safely home, flaunting from her periscope two flags bearing the death's head and cross-bones,

a yellow one for the "Hela" and a white one for "S126."

Aircraft, both dirigibles and aeroplanes, have demonstrated their utility in modern warfare. The combatants on both sides employed them largely for reconnoitring purposes, in locating the enemy and directing the fire of the artillery. In the first six or seven weeks of the war British aeroplanes travelled some 80,000 miles. The Germans utilised their Zeppelin airships and aeroplanes upon several occasions to drop bombs into Paris and various Belgian cities, but with little more effect than scaring non-combatants, who according to recognised military canons should not be subjected to aerial attacks. The British Naval Air Wing organised a legitimate raid upon the enemy that was fruitful of result and bore eloquent testimony to the effectiveness of the new arm of the service. Squadron-Commander D. A. Gray, R.N., Lieutenant R. L. G. Marix and Lieutenant S. U. Sippe penetrated more than a hundred miles into country held by the enemy in order to attack a German Zeppelin station at Dusseldorf. From a height of 500 feet Lieutenant Marix dropped a bomb that passed through the roof of a shed and destroyed a huge dirigible, the igniting gas giving rise to flames several hundreds of feet high. After accomplishing this blow at the enemy the aviators returned safely to headquarters, although a previous unsuccessful attempt had prepared the Germans for an attack and anti-aircraft guns had been mounted to foil a further raid.

On 15th October H.M.S. "Theseus" and "Hawke," both of the "Edgar" class, were engaged in patrol work in the northern waters of the North Sea, when they were attacked by German submarines. In the case of the first-named vessel the torpedo that was launched at her missed its mark. Unfortunately the "Hawke" was struck at a time when she was alone and could

look for no consorts to close to assist in reducing the number of deaths from drowning. The shattering blow of the torpedo not only holed the vessel but caused her boilers to explode. With the steam derricks put out of gear, it was only possible to launch a cutter in the ten minutes before the ship went down. Some portion of the officers and crew was saved by means of rafts; and later a Norwegian trawler came upon the scene and picked up about fifty of the survivors. The submarine periscope showed itself about 200 yards from the cutter. She dipped and re-appeared at only a few yards distance. Notwithstanding their unnerving experience the survivors were prepared to have a go at the enemy. One seaman, seizing an iron tiller, expressed his intense desire "to punch the beggar's head," while his mates rowed hard to give him a chance of smashing the periscope. The submarine, however, recognised the danger and sped off out of sight. Tragedies such as the loss of the "Hawke" have to be viewed in their proper perspective. Vessels engaged in the commercial blockade of the enemy's coast must ever be liable to attack by a prowling submarine; and at the speed at which the patrols necessarily move crinoline net protection is out of the question. The loss of so many lives is one deplorable feature of having to fight an enemy who refuses to come out in the open; it is one further proof that

> "We have fed our sea for a thousand years, And she calls us still unfed; Though there's never a wave of all her waves, But marks our English dead."

Captain Cecil H. Fox, who struck the first active naval blow of the war on 5th August, secured his revenge six weeks later for the loss of the "Amphion." The gallant captain, then in command of the new "Undaunted," sister ship to the "Arethusa," and accompanied by the destroyers "Lance," "Lennox," "Legion," and "Loyal," all of the "L" class, engaged four German destroyers that had stolen round the Dutch coast. Here was an opportunity for an old-fashioned above-board fight in which victory would go to the one who could hit hard and hit often. The fact that the four Germans were sent to the bottom in less than two hours testified to the splendid handling of the British squadron, the out-manœuvring of the enemy, and the accuracy of the gunfire. Thus within forty-eight hours we nearly balanced the loss of the "Hawke," so far as personnel was concerned, for each German destroyer carried about eighty-five officers and men.

Only one day later we lost our first submarine to the Germans, "E₃" having been sunk in a German bay in the North Sea. That we had not suffered earlier loss was remarkable, for Commodore Roger Keyes reported to the Admiralty that "the submarines had been incessantly employed on the enemy's coast, in the Bight

of Heligoland and elsewhere, and had obtained much valuable information regarding the composition and movement of his patrols. They had occupied his waters and reconnoitred his anchorages, and, while so engaged, had been subjected to skilful and well-executed anti-submarine tactics; hunted for hours at a time by torpedo craft, and attacked by gun-fire and torpedoes."

The Germans were not allowed long to gloat over the sinking of "E3." On 25th October H.M.S. "Badger," a destroyer of the "I" class, rammed and sank a hostile submarine off the Dutch coast. Commander Charles S. Fremantle, of the "Badger," is a nephew of Sir E. R. Fremantle, and a descendant of Captain Thomas Fremantle, who fought in the battles of Copenhagen and Trafalgar. It is interesting and pleasant to note that in the present-day Fleet there are not a few officers who bear names reminiscent of many a hard-fought action in the days of the good old wooden walls.

The maintenance of the safety of our main ocean trading routes, and the convoying of troops from various quarters of the globe to the seat of war in France made heavy demands upon the British cruisers; and thus several German commerce destroyers were left rather a free hand in some ocean areas, notably the South Atlantic, the Indian and Pacific Oceans. Of these hostile cruisers the "Emden" made herself most notorious; and between roth September and 20th October she captured nineteen British ships, of which she sank fifteen. Nevertheless, the British total losses from commerce destroyers did not work out at more than one per cent. of our shipping at sea, which was almost laughable compared to the sweeping of the German mercantile marine from all the seas of the world. On 9th November, however, H.M. Australian ship "Sydney" caught the "Emden" off Keeling Cocos Island, drove her ashore and burnt her.

On 31st October H.M.S. "Hermes" was sunk in the Straits of Dover by a German submarine. Upon this occasion there was little loss of life owing to friendly craft being in the vicinity to save most of the complement of 430 officers and men. The "Hermes," a sister vessel to the "Highflyer," was employed as a seaplane carrying ship, and her loss was of practically no significance as bearing upon the relative strengths of the rival fleets.

After the Germans had wreaked their vengeance on Belgium, from Ostend they proposed to hack their way through the Allies to Dunkirk and Calais. Thereupon on 18th October commenced the most extraordinary battle in the history of warfare, for it was fought on land and water, in the clouds and beneath the waves. With a vast superiority in numbers the Germans would have gained their objective, but for the intervention of three British monitors, the "Humber," "Mersey," and "Severn," under the command of Admiral Hood, who is of the same family as one of Nelson's favourite captains. These vessels, built at Barrow



(Commenced a new term of office as First Sea Lord, 31st October 1914)

for the Brazilian Government for service as river warships, were taken over by the British Admiralty upon the outbreak of war. They are of less draught than a destroyer, but carry a heavier armament than a light cruiser. Their dimensions are: length, 265 feet; draught, 81 feet; displacement, 1260 tons. Their speed is II knots, and the armament consists of two 6-inch guns, two 4.7-inch howitzers, and four 3-pounders. The fire of the monitors was directed by our aerial scouts, who fought continually with the German aircraft. From the shallow shore water the British guns were plied with remorseless accuracy, speedily silencing the German heavy artillery and decimating their ranks with shrapnel. The enemy's submarines tried in vain to torpedo the destructive monitors. The shoal water in itself was a hindrance to effective submarine work, but in any case the shallow draught of the monitors afforded a poor mark, and in addition they steamed at full speed as they ravaged the German positions; and further, a flotilla of protecting British destroyers kept strict watch for any periscope that might show itself on the surface. All through the remaining days of October the deadly struggle continued; and November was ushered in to find the Germans still held at bay by the Allied troops, and the naval guns still roaring from the sea.

Historians yet unborn will write the full story of the struggle between British Sea-Power and German aggression, and will add its records to the annals which we have traced from Egypt to this day. Here and now, at the close of the present chapter, and at the opening of the new one for our sons, we may remind them, confidently and humbly, of the English poet's faith in England:—

"It is not to be thought of that the flood
Of British freedom, which, to the open sea
Of the world's praise, from dark antiquity
Hath flow'd, with pomp of waters unwithstood,—
Roused though it be full often to a mood
Which spurns the check of salutary bands,—
That this most famous stream in bogs and sands
Should perish; and to evil and to good
Be lost for ever.

In our halls is hung
Armoury of the invincible knights of old.
We must be free, or die, who speak the tongue
That Shakespeare spake; the faith and morals hold
Which Milton held. In everything we are sprung
Of Earth's first blood; have titles manifold."

APPENDIX

2 T 657

AUGUST 1914

APPENDIX

THE BRITISH NAVY

ABBREVIATIONS:—am. = amidships: f. = forward; a. = aft; P.D. = protective deck; C.T. = conning tower; pr. = pounder; T.T. = torpedo tubes; T. = turbine engines (in all other cases the engines are reciprocating); Oil = oil fuel only (in other cases coal is the principal fuel, though oil may be an auxiliary). The class name of each group is printed in heavy type

DREADNOUGHT BATTLESHIPS

	DIGITISH NA				
Armanent.	Belt: 13½ in.; P.D. 3 15 in., ten; 6 in., sixteen: in.; Guns 13½ in.; 12 pr., twelve; T.T. five.	1914 Belt: 13½ in.; P.D. 2¾ 15 in., eight; 6 in., six-1915 in.; Guns 13½ in.; C.T. teen; 12 pr., twelve; 1915 13½ in.	twenty; 3in., ten; T.T.	13. 3	13.5, ten; 6 in., sixteen; T.T. three.
Armour.	Belt: 13½ in.; P.D. 3 in.; Guns 13½ in.; C.T. 13½ in.	Belt: r3½ in.; P.D. 2¾ in.; Guns r3½ in.; C.T. r3½ in.	Belt: am. 9 in.; P.D. 2½ rz in., fourteen; 6 in., in.; turrets, 9 in. twenty; 3 in., ten; T.T.	Belt: 12 in.; P.D. 24 in.; Cuns 12 in.; C.T. 12 in.	3000 870 1914 Belt: 12 in.; P.D. 3 in. 13.5, ten; 6 in., sixteen; T.T. three.
Com- pleted.	1915	1914 1915 1915 1915 1915	1914	1914 1914 1914 1914	+161
Com- plement	900	006	1100	006	870
Horse. Speed Coal Com. Compower. (knots) (tons). plement pleted.	4000	Oil	:	4000	3000
Speed (knots)	22.5	25	22	22.5	21
	29,000 44,000 22.5 4000	28,000	32,000	25,000 29,000 22.5 4000	20,000
Length Beam Tonnage. (feet).	29,000	92 27,500 28,000 25	:	25,000	91 23,000 20,000 21
Beam (feet).	4	92	68	06	16
Length (feet).	:	620	637	580	562
NAME	Royal Sovereign Royal Oak . Revenge . Ramillies . Resolution .	Queen Elizabeth Barham Malaya Valiant Warspite	Agincourt .	Iron Duke Benbow Emperor of India Marlborough	Erin

				APPE	ENDIX		659
13.5 it., tcn; 4 in., sixteen; 3 pr., four; T.T. three.	12 in., ten; 4 in., sixteen; 3 pr., four; T.T three.	12 in., ten; 4 in., eighteen; 3 pr., four; machine, six; T.T. three.	12 in., ten; 4 in., sixteen; 3 pr., four; T.T. three.	12 in., ten; 12 pr., twenty- four; T.T. five.	12 in., four; 9.2 in., ten; 12 pr., twenty-four; T.T five.	12 in., four; 9.2 in., four; 6 in., ten; 12 pr., four-teen; 3 pr., fourteen; Maxims, two; T.T. four.	ro in., four: 7.5 in., four- teen; 14 pr, fourteen; 12 pr., two; 6 pr., four; Maxims, four; T.T. two.
Belt: 12 in.; P.D. 2 ³ / ₄ in.; Barbette 10 in.	Belt: am. 10 in.; f. 8 in.; a. 7 in.; P.D. 24 in.; Barbette and C.T.	Belt: am. 9 $\frac{3}{4}$ in.; f. 6 $\frac{1}{2}$ in.; P.D. 2 $\frac{3}{4}$ in.; Barbette 11 in.	Belt: am. II in.; f. 6 in.; a. 4 in.; P.D. 2\frac{2}{4} in.; Barbette 12 in.	Belt: am. II in.; f. 6 in.; a. 4 in.; P.D. $2\frac{3}{4}$ in.; Barbette I2 in.	(Krupp) Belt: am. 9 in.; f. 4 in.; a. 4 in.; P.D. z in.; Barbette 12 in.; C.T. 12 in.	(Krupp) Belt: am. 9 in.; f. 6 in.; a. 2 in.; P.D. 2 in.; Barbette 12 in.; C.T. 12 in.	(Krupp) Belt: am. 7 in.; f. 3 in.; a. 2 in.; P.D. 3 in.; Barbette 10 in.; C.T. 10 in.; Casemates 7 in.
1911 1912 1912 1912	1161 1161 1161	1909 1910 1910	1909 1909 1909	906I	1907	1904 1906 1906 1906 1905 1905 1905	1904
800	800	724	870	800	747	780	200
3500	2800	2700	2700	2700	2500	5000	2000
21	21	21	21	21	18	18	20
27,000	25,000	24,500 2I	23,000	23,000	16,500 20,000	18,000	11,800 12,500
22,500	20,000	19,250	18,600	17,900	16,500	16,350	11,800
881	98	**	82	82	62	78	71
545	510	500	490	490	420	453	450
H	T	L	E			II H	
Orion Conqueror . Monarch . Thunderer .	Colossus . Hercules . Neptune .	St Vincent . Collingwood Vanguard .	Bellerophon . Superb . Téméraire .	Dreadnought .	Lord Nelson . Agamemnon	King Edward VII Africa Britannia Hibernia Commonwealth Dominion . Zealandia .	Swiftsure Triumph .

DREADNOUGHT BATTLESHIPS-continued

			-	
Armament.	12 in., four; 6 in., twelve; 12 pr., eighteen; 3 pr., six; Maxims, two; T.T. four.	rz in., four; 6 in., twelve; rz pr., twelve; 3 pr., six; Maxims, two; T.T. four.	12 in., four; 6 in., twelve; 12 pr., twelve; 3 pr., six; Maxims, two; T.T. four,	12 in., four; 6 in., twelve; 12 pr., sixteen; 3 pr., twelve; Maxims, two; T.T. five.
Armour.	(Krupp) Belt: am. 9 in.; f. 6 in.; P.D. 3 in.; Barbette 12 in.; C.T. 12 in.; Casemates 6 in.	(Krupp) Belt: am. 7 in.; f. 5 in.; a. 1½ in.; P.D. 2½ in.; Barbette 11 in.; C.T. 11 in.; Casemates 6 in.	(Harvey Nic.) Belt: am. 6 in.; f. 2 in.; a. 19 in.; P.D. 2§ in.; Barbette 12 in.; C.T. 12 in.; Casemates 5 in.	(Harvey) Belt: am. 9 in.; P.D. 4 in.; Barbette 14 in.; C.T. 14 in.; Casemates 6 in.
Com- pleted.	1901 1904 1902 1902 1902 1902 1902	1903 1904 1903 1903	1899 1902 1900 1900 1900 1900	1895 1898 1898 1897 1897 1897 1896
Com- plement.	760	750	700	750
Coal (tons).	2200	2000	2300	2000
Speed (knots).	18	19	8	17
Horse-	15,000	18,000	12,950 13,500	12,000
Tonnage.	15,000	14,000 18,000	12,950	14,900 12,000 17
Beam (feet).	75	75	7-4	75
Length (feet).	420	425	420	412
NAME.	Formidable Prince of Wales London . Bulwark Irresistible . Queen Venerable . Implacable .	Duncan Albemarle . Cornwalls . Exmouth . Russell	Vengeance	Majestic Cæsar

BATTLE CRUISERS

Queen Mary . Tiger Lion	029		27,000	88 27,000 78,700 31 3800 1000	31		1000	1914 1913 1911	1914 Iselt: 9 in.; F.D. 3 in.; 13.5 in., eight: 4 in., six- 1913 Turrets 9 in. 13.5 in., eight: 6 in., twelve; 1.T. two. 1911 Belt: 9 in.; P.D. 3 in.; 13.5 in., eight; 4 in.,	1914 Belt: 9 in.; F.D. 3 in.; 13.5 in., eight; 4 in., six- 1913 twen; T.T. two. 13.5 in., eight; 6 in., twelve; T.T. two. 13.5 in., eight; 6 in., 1911 Belt: 9 in.; P.D. 3 in.; 13.5, in., eight; 4 in.,
Princess Royal J Australia New Zealand (H.M. New	567	S 85	19,200	82 19,200 44,000 26 250	26		780	1912 1912 1912	lurrets 9 m. Belt: 8 in.; P.D. 3 in.; Turrets 10 in.	1912 Intrets 9 in. 12 in., eight; 4 in., six-1912 Turrets 10 in. 1912 Turrets 10 in.
Invincible	530	78	17,250	78 17,250 41,000 25 2500	25	2500	750	1908	(Krupp) Belt: am. 7 in.;	1908 (Krupp) Belt: am. 7 in.; 12 in., eight; 4 in., six- 1908 f. 6 in.; a. 4 in.; teen; T.T. th-ree.
Indomirable Indefatigable	555	80	18,750	80 18,750 45,000 26 2500	26	2500	800	1161	1 urrets 10 m.; F.D. 2½ in.	

ARMOURED CRUISERS

.. All Battle Cruisers have turbine engines, except Invincible.

		66I
	(Krupp) Belt: am. 6 in.; 9.2 in., four; 7.5 in., ten; f. 4 in.; a. 3 in.; P.D. T.T. three (submerged). If in.; Barbette 8 in.	9.2 in., six; 6 in., ten; 3 pr., twenty; T.T. three (submerged). (Krupp) Belt: am. 6 in.; 9.2 in., six; 7.5 in., four; f. 4 in.; a. 3 in.; P.D. 3 pr., twenty-four; d. 4 in.; Barbette 7 in. Same as Duke of Edin- 99 burgh.
	(Krupp) Belt: am. 6 in.; f. 4 in.; a. 3 in.; P.D. 1\frac{3}{2} in.; Barbette 8 in.	(Krupp) Belt: am. 6 in.; f. 4 in.; a. 3 in.; P.D. \frac{4}{3} in.; Barbette 7 in.
	1908 1908 1908	1905 1907 1907 1906 1906
	755	720
,	2000	2000
	23	8 3
	27,000	23,500
	520 72 14,600 27,000 23 2000	480 73 13,550 23,500 23 2000
	72	73
	520	480
		din-
	Minotaur . Defence Shannon	Duke of Edinburgh Achilles . Cochrane . Natal Warrior . Black Prince

ARMOURED CRUISERS—continued

	IRE DE	HIISH NAVY		
Armament.	Krupp) Belt: am. 6 in.; f.5 in., four; 6 in., six; f. 2 in.; P.D. 2 in.; a pr., twenty; Maxims, two; T.T. two (submates 5 in.	6 in., fourteen; 12 pr., eight; pom-poms, ten; 3 pr., three; T.T. two (submerged).	Krupp) Belt: am. 6 in.; front, two; 6 in., sixten; 2 in.; P.D. 2 in.; teen; 12 pr., twekve; 3 Barbette 6 in.; Casepr., two; machine, six; mates 6 in.	9.2. in., two; 6 in., twelve; 12 pr., twelve; 3 pr., three: machine, four; T.T. two (submerged).
Armour.	(Krupp) Belt: am. 6 in.; f. 2 in.; P.D. 2 in.; Barbette 5 in.; Case- mates 5 in.	(Krupp) Belt: am. 4 in.; f. 2 in.; P.D. 2 in.; Barbette 5 in.; Casemates 4 in.	(Krupp) Belt: am. 6 in.; f. 2 in.; P.D. 2 in.; Barbette 6 in.; Case- mates 6 in.	(Krupp) Belt: am. 6 in.; f. 2 in.; P.D. 3 in.; Barbette 6 in.; Casemates 5 in.
Com- pleted.	1905 1905 1905 1905 1905	1903 1904 1904 1904 1903 1903 1903	1902 1903 1903 1902	1901 1904 1902 1902 1902
Com- Com-	650	537	006	750
Speed Coal (knots).	1800	1600	2500	1600
Speed (knots).	6. 6. 1.163	23	23	2 1
Horse-	21,000	9,800 22,000	14,100 30,000	21,000
Beam Tonnage.	11,000	008,6	14,100	69 12,000 21,000
Beam (feet).	89	99	1/	69
Longth (feet).	460	450	520	470
NAME.	Devonshire Antrim Argyll Carnarvon . Hampshire . Roxburgh .	Monmouth Cornwall Cornwall Cumberland . Lancaster Suffolk Donegal Essex Kent Berwick	Drake	Cressy Euryalus Aboukir Bacchante . Hogue Sutletj

_
Protected)
Class
(ISt
RS
CRUISERS

 		APPENDIX
1898 P.D. 6 in.; Barbette 6 in.; 9.2 in., two; 6 in., sixteen; 12 pr., sixteen; machine six T.T. four	P.D. 4 in.; Casemates 6 in., sixteen; 12 pr., twelve; 3 pr., six; Maxims, two; T.T. three (two submerged).	P.D. 3 in.; Casemates 9.2 in., two; 6 in., ten; 6 pr., twelve; 3 pr., five; Maxims, two; T.T. two (submerged).
P.D. 6 in.; Barbette 6 in.; Casemates 6 in.	P.D. 4 in.; Casemates 4 in.	P.D. 3 in.; Casemates 6 in.
1898	1899 1902 1900 1900 1900 1899 1898	1893 1894 1894 1894 1894 1893 1893
840	- 089	550
3000	2000	1250
22	21	19
25,000	10,000	7,350 12,000 19
71 14,400 25,000	11,000 10,000 21 , 2000	7,350
71	69	99
520	460	300
 Powerful class— Terrible	Diadem Spartiate Amphitrite Andromeda Argonaut Aradue Europa	Edgar Endymion Gibraltar Grafton St George Theseus Crescent Hawke Royal Arthur.

CRUISERS (2nd Class Protected) 1

		T	HE BRIT	ISH NAVY	
Armament.	6 in., eleven; 12 pr., nine; 3 pr., six; Maxims, two; T.T., two (submerged)	6 in., eleven; 12 pr., nine; 3 pr., six; Maxims, two; T.T. two (submerged).	6 in., ten; 12 pr., nine; 3 pr., three; Maxims, two; T.T. three (two submerged).	6 in., eleven; 12 pr., nine; 3 pr., seven; Maxims, two; T.T. three (two submerged).	6 in., two; 4.7 in., eight; 6 pr., eight; 3 pr., one; T.T. four (above water).
Completed	1904 1905	1899 1900 1899	1899 1896	1899 1899 1899 1897 1897 1897 1897	1895 1895 1895 1895 1895 1895 1895
Com- plement	475	430	420	0+4	320
Coal (100s).	1225	1100	1180	1076	1000
Speed (knots)	21	20	19	193	193
Horse- power,	12,500	10,000	10,000	0096	0006
Tonnage	5800	5600	5750	5600	4360
Beam (feet).	56	54	5.8	5.4	64
Length (feet).	355	350	320	370	320
NAME.	Challenger) Encounter)	Highflyer Hyacinth ∫ Hermes ∫	Arrogant class— Vindictive · . Furious ·	Talbot Diana Isis Isis Juno Dido Doris Eclipse Venus Minerva	Astræa Charybdis Flora Forte Fox Hermione Bonaventure Cambrian

¹ Generally 3-2 in. steel deck and 4 in. casemates.

	A	PPENDIX		
6 in., two; 4.7 in., six; 6 pr., eight; 3 pr., one; machine, four; T.T. four (above water).	6 in., eight; QF. and machine, nine. Birmingham. Lowestoft and Nottingham, 6 in., nine.	6 in., two; 4 in., ten; machine, four.	6 in., eight; QF. and machine, nine.	6 in., eight; Q.F. and machine, nine.
1893 1893 1893 1893 1892 1892 1892 1892	1912 1914 1914 1913 1913	0161 0161 0161 0161	1161 1161 1161	1914 1912 1912
275	380	375	390	350
550	1000	800	1000	1000
0	2,00	27	25	253
6) 000	26,500	24,500	23,500	25,000
3500	2400	+800	5250	2400
4	8	7	48	\$
300	430	430	430	091
,	<u> </u>	Ţ.	L	<u>L</u>
Apollo class— Afolus	Chatham . Birmingham Lowestoft . Nottingham Dublin . Southampton	Bristol Glasgow . Gloucester Liverpool . Newcastle .	Weymouth . Dartmouth Falmouth .	Colonial class— Brisbane . Melbourne . Sydney .

CRUISERS (3rd Class Protected) 1

Armament.	4 in., twelve; 3 pr., eight; Maxims, two; T.T. two.	4 in., eight; T.T. two.	4.7 in., eight; T.T. three.
Completed.	1904 1905 1905 1904	1897 1899 1898 1898	1681
Com- plement	300	235	218
Coal (tons).	200	400	400
Speed (knots).	23	50	61
Horse-	0,800	7,000	7,500
Tounage	3000	2135	2575
Beam (feet)	04	36½	41
Length (feet).	360	305	265
NAME	$ \begin{array}{cccc} \textbf{Topaze} & & & & \\ \textbf{Diamond} & & & & \\ \textbf{Sapphire} & & & & \\ \textbf{Amethyst} & & & \\ \textbf{Pioneer} & & & \\ \end{array} $	Pelorus Pyramus Psyche Proserpine . Pegasus	Philomel

CRUISERS (Unarmoured)

4 in., ten; 3 pr., four. Boadicea and Bellona carry six 6 in. guns instead of 4 in.	
1909 1912 1912 1912 1911 1911	nates
320	in. casen
0009	ck and 4
26	steel de
20,000	Generally 2 in. steel deck and 4 in. c
3440	¹ Gen
£ 4	
385	
<u> </u>	
Boadicea Amphion Bellona Blanche Active Blonde Fearless	

SCOUTS

12 pr., ten; 3 pr., eight; T.T. two.	6 in., two; 4 in., six.	6 in., two; 4 in., six.
1905 1905 1905 1905 1905 1905 1905	1001 1001 1001 1001 101 101 101 101	1915 1915 1915 1915 1915 1915
268 SERS	280	:
45° CRU	75° (Oii)	750 (Oii)
255 URED	30	30
2700 16,500 25 450 268 CIGHT ARMOURED CRUISERS	30.000	40,000
2700	3600	3740
38	68	:
370	410	:
Sentinel Adventure Attentive . Foresight . Forward . Fathfinder Patrol . Skirmisher.	Arethusa Undaunted Aurora Galatea Inconstant Royalist Penelope Phæton	Calliope Conquest . Comus Cleopatra . Cleopatra . Carysfort . Carysfort . Caroline . Cordelia .

DESTROYERS

Class (1913-14) (Displacement, 1200-1350 tons; H.P., 27,000; 34 knots; armament, four 4 in.; four 21 in. torpedo tubes):—Manly, Mansfield, Marksman, Mastiff, Matchless, Menace, Mentor, Meteor, Milne, Minos, Miranda, Monitor, Moorsom, Morris, Murray, Myngs. (T. Oil.)

Class (1912-13) (Displacement, 980-1100 tons; H.P., 25,000; 32-33 knots; armament, three 4 in.; four 21 in. torpedo tubes):—Laertcs, Laforey, Lance, Landrail, Lark, Laurel, Laverock, Lawford, Legion, Lennox, Leonidas, Liberty, Linnet,

Llewellyn, Lookout, Louis, Loyal, Lucifer, Lydiard, Lysander. (T. Oil.)

Class (1912-13) (Displacement, 928-1100 tons; H.P., 28,000; 30-32 knots; armament, three 4 in.; four 21 in. torpedo tubes):—Acasta, Achates, Ambuscade, Ardent, Christopher, Cockatrice, Contest, Fortune, Garland, Hardy, Lynx, Midge, Owl, Paragon, Porpoise, Shark, Sparrowhawk, Spitfire, Unity, Victor. (T. Oil.)

"I" Class (1911) (Displacement, 750-850 tons; H.P., 16,500-20,000; 30 knots; armament, two 4 in.; two 21 in. torpedo tubes):—Acheron, Archer, Ariel, Attack, Badger, Beaver, Defender, Druid, Ferret, Firedrake, Forester, Goshawk, Hind, Hornet, Hydra, Jackal, Lapwing, Lizard, Lurcher, Oak, Phoenix, Sandfly, Tigress. (T. Oil.)

Class (1910) (Displacement, 720-750 tons; H.P., 13,000; 27 knots; armament, two 4-in.; two 21 in. torpedo tubes):—Acorn, Alarm, Brisk, Cameleon, Comet, Fury, Goldfinch, Hope, Larne, Lyra, Martin, Minstrel, Nemesis, Nereide, Nymphe, Redpole, Rifleman, Ruby, Sheldrake, Staunch. (T. Oil.)

Class (1909) (Displacement, 900-1000 tons; H.P., 2100; 27 knots; armament, one 4 in.; two 21 in. torpedo tubes):—

Basilisk, Beagle, Bulldog, Foxhound, Grasshopper, Harpy, Mosquito, Nautilus, Pincher, Racoon, Rattlesnake, Renard, Savage, Scorpion, Scourge, Wolverine. (T.)

"F" Class (1907-9) (Displacement, 865-1050 tons; H.P., 14,000-15,500; 33 knots; armament, five 12 pr.; two 18 in. torpedo tubes):—Afridi, Amazon, Cossack, Crusader, Ghurka, Maori, Mohawk, Nubian, Saracen, Tartar, Viking, Zulu. (T. Oil.) "王"

Class (1903-8) (Displacement, 530-550 tons; H.P., 7500; 25 knots; armament, four 12 pr.; two 18 in tribed, tubes):—Arun, Boyne, Chelmer, Cherwell, Colne, Dee, Derwent, Doon, Eden, Erne, Ettrick, Exe, Foyle, Garry, Itchen, Jed, Kale, Kennet, Liffey, Moy, Ness, Nith, Ouse, Ribble, Rother, Stour, Swale, Test, Teviot, Ure, Usk, Waveney, Wear, Welland. (T. only Eden.)

Class (1895-1901) (Displacement, 300-400 tons; H.P., 6000; 30 knots; armament, one 12 pr.; five 6 pr.; two 18 in.

"C" Class (1895-1901) (Displacement, 300-400 tons; H.P., 6000; 30 knots; armament, one 12 pr.; five 6 pr.; two 18 in. torpedo tubes):—Albatross, Avon, Bat, Bittern, Brazen, Bullfinch, Cheerful, Crane, Dove, Electra, Fairy, Falcon, Fawn, Flirt, Flying Fish, Gipsy, Greyhound, Kestrel, Leopard, Leven, Mermaid, Osprey, Ostrich, Racehorse, Recruit, Roebuck, Star, Sylvia, Thorn, Velox, Vigilant, Violet, Vixen, Vulture. (T. Velox only.)

"B" Class (1895-1901) (Displacement, 300-400 tons; H.P., 6000; 30 knots; armament, one 12 pr.; five 6 pr.; two 18 in. torpedo tubes) :—Albacore, Arab, Bonetta, Ernest, Express, Griffon, Kangaroo, Lively, Locust, Myrmidon, Orwell, Panther,

Peterel, Quail, Seal, Spiteful, Sprightly, Success, Syren, Thrasher, Wolf.

"A" Class (1894-5) (Displacement, 275-350 tons; H.P., 4500; 27 knots; armament, one 12 pr.; five 6 pr.; two 18 in. torpedo tubes):—Conflict, Fervent, Lightning, Opossum, Porcupine, Ranger, Sunfish, Surly, Zephyr.

TORPEDO BOAT

Nos. I-36 (launched 1906-09). Displacement, 250-300 tons; speed, 26 knots; armament, two 12 pr. guns and 3 T.T. (T. Oil.) About 70 older vessels (1885-1901), of little fighting power.

SUBMARINES

Disp'acement. Horse Power, Tubes. Guns.			320 ,, 300600 2		
Date of Building. Speed in Knots,	1904-06		1906-09 10-I4	 	
CLASS. No. in Class. D.	6	OI	37	9I	9

MISCELLANEOUS SHIPS

Repair Ships: Assistance, Cyclops, Reliance. Hospital Ships: Maine and Mediator.

Depot Ships for Torpedo Boat Destroyers: Blake, Blenheim, Leander, St George, Tabaristan, Tyne, Venus, Woolwich, etc. Depot Ships for Submarines: Adamant, Alecto, Arrogant, Bonaventure, Dolphin, Forth, Hazard, Hebe, Maidstonc, Onyx,

Pactolus, Rosario, Thames, Vulcan, etc.

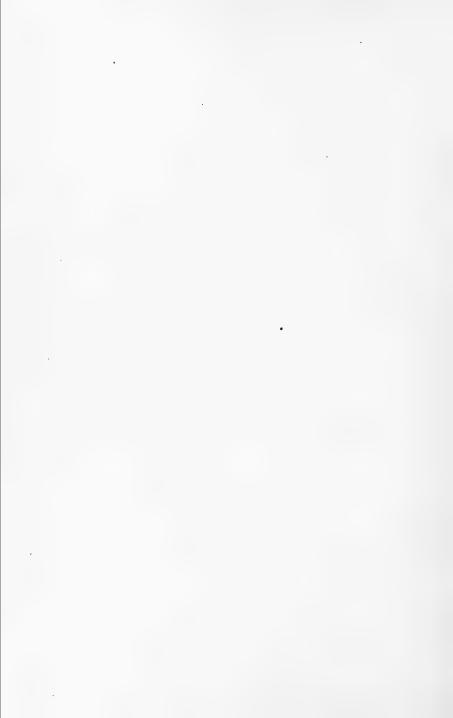
Mine-layers, Surveying Ships, Coastguard Cruisers, Oil Carriers, etc.

Merchant Cruisers: About 30 in number, of which the Cunard liner Aquitania (47,000 tons) is the largest.

AUSTRALIAN NAVY: H.M.S. Australia, Brisbane, Melbourne, Sydney, Encounter, Pioneer, etc. (See particulars, pp. 660, 663,

Destroyers: Derwent, Paramatta, Swan, Torrens, Warrego, and Yarrow.

Submarines: four. CANADIAN NAVY: H.M.S. Niobe and Rainbow. (See pages 663, 665.)



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